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This computer model is a user-friendly, menu-driven tool that can be easily used to estimate component breakout offsetting costs. In addition an estimate of the lost opportunity costs, the potential losss to the government of devoting time and effort to components at the expense of the total system, is included. Operator and Maintenance Manuals are also available.

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COMPONENT BREAKOUT COMPUTER MODEL

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COMPONENT BREAKOUT COMPUTER MODEL

1.0 Executive Summary

Component breakout is the process whereby the government purchases a component that was previously provided as contractor furnished equipment and provides the item to the prime contractor to be incorporated into the end item. DOD policy concerning breakout states that it should be used if substantial net cost savings will probably be achieved and this action will not jeopardize quality and performance. Concentration of breakout effort should be on the components of the high dollar value sysems, since these represent the highest costs and offer the potential for the greatest savings. In order to realistically estimate the savings associated with component breakout, the government must be able to compute the offsetting costs associated with the government furnished equipment operation.

This computer model is a user-friendly, menu-driven tool that can be easily used to estimate component breakout offsetting costs. In addition an estimate of the lost opportunity costs, the potential loss to the government of devoting time and effort to components at the expense of the total system, are included in the results.

The package for this model consists of three computer discs (floppy disc), a user's manual, and a maintenance manual. The component breakout model (CBOM) is in two forms, compiled and uncompiled basic programs. Each will provide the user with the

same screen and printer outputs. The CBOM can be operated on any IBM or IBM compatible personal computer or on the current Zenith personal computers.

The model was validated by using current studies completed for or by the Aeronautical Systems Division (ASD) and the Air Force Logistics Command (AFLC) at Wright-Patterson AFB, Ohio. Several ASD personnel have exercised the model and are pleased with its ease of operation and clarity of results.

2.0 Current Component Breakout Literature

2.1 Literature Overview: The Authors completed an extensive computer literature search in the area of component breakout. The literature is replete with statements that enough data and/or information is not available to intelligently make the determination to break out items from the prime contractor. Most of the reports that have been prepared by those System Program Offices (SPO) that have been forced into component breakout show significant savings were realized as a result of CBO. Unfortunately, these studies did not normally include the cost of the effort expended by the SPO personnel in the CBO effort. In addition nearly all of the studies failed to include the support costs of the personnel and facilities involved.

2.2 Literature Specifics: A study completed in 1986 by Raymond S. Lieber et all of the F-16 SPO titled "Support Equipment - Is it Overpriced?" was the most complete CBO study encounter by the authors. This report included several cost factors that were provided by the 2750th Air Base Wing (ABW) at Wright-Patterson AFB. These included:

Items	Cost Per Person
Supplies	$1,789.00
Equipment	694.00
Computer Support	3,676.00
Other Rents, Maint, etc.	354.00
Communication	1,283.00
Reproduction	46.00
Facilities	164.00
Training	310.00
Material Markup	4,602.54
Material Overhead	277.31
General and Administrative	2,599.59
Travel	6,070.00

In addition the Step 5 Level was used for all civilian grades for calculation purposes. The fringe benefit rate as determined by ASD was 27.3 percent. Office space for SPO personnel was based upon the Base Civil Engineer's average space per person of 130 square feet. This figure is combined with the current 2750th ABW's cost of services, utilities, maintenance, and repairs which is $4,731.05 to to determine the cost of "housing" each person involved in the CBO effort.

A study conducted by Major Brian McDonald titled "Measuring the Net Benefits of Component Breakout" addressed offsetting costs of component breakout. He noted that several studies noted the inconsistencies associated with computing the offsetting

costs of component breakout. His research and others' indicate that the major costs of CBO is the cost of personnel that are required to manage the program. For example he estimated that 24 man months of effort were necessary per contract during the contract preparation and that 1.75 man months per month were required during the duration of the contract. Major McDonald list the tasks associated with CBO and the responsibility of the program office. These are:

1. Develop statement of work, contract specifications, and schedules.
2. Make cost estimates and negotiation strategies.
3. Negotiate contract.
4. Integration of contractors.
5. Manage configuration management.
6. Develop test specifications.
7. Negotiate ECPs, CCPs, etc.
8. Manage quality.
9. Manage all reviews.
10. Review and monitor all plans.
11. Develop cost-schedule reporting.
12. Manage out-of-station problems.
13. Manage all data.
14. Manage the logistics.

Major McDonald also included some ideas on the functions of the administration/audit agency's tasks. He cautions not to omit these costs in cost calculations because these are not an SPO

cost. Rather, these are a government cost and must be included in the offsetting cost computations.

Jay Martin Cohen in his Naval Postgraduate School Masters Thesis titled "Government Furnished Equipment" listed the factors that must be included in all CBO offsetting cost estimates. This list follows:

1. Estimate vendor's cost.
2. Determine the prime's markup.
3. Determine the cost of data.
4. Determine the cost of transportation, storage, and testing.
5. Estimate the cost of administration and technical effort.
6. Estimate the cost of additional technical support.
7. Estimate the cost of contract administrative services.
8. Estimate other possible costs.

A Masters Thesis by Captains Dillard and Inscoe of the Air Force Institute of Technology indicated among other things that many who had completed CBO studies did not include the cost of personnel or facilities. They generally assumed that the facilities and personnel would be "there" whether or not the CBO was accomplished and therefore, no additional cost to the government.

Thomas McCann of Modern Technologies Corporation in a Phase I report of his study titled "Decision Rules for Enhanced Breakout" used the data bases at the AFLC logistics centers for his analysis. His study divides the CBO effort into several

activities that must be accomplished during the analysis and management of the effort. Several cost factors were generated based upon the recent historical records of the centers.

The Manpower Office at ASD has developed and validated a workload assessment model for predicting the program office manpower requirements. This model has been successfully used to estimate the manpower requirements for several years at ASD.

The ASD Manpower Office has also developed a workload assessment model for prediction of standard contract office man power needs. This model accomplishes typical predictions based upon the type of contract and the value of the contract. This is a very straight forward predictive model and has been tested to the satisfaction of the ASD SPO personnel interviewed by the authors.

An unpublished paper by personnel of the Air Force Business Research Management Center at Wright-Patterson AFB listed the following offsets to government breakout savings:

Storage

Security

Transportation

Equipment/Tooling

Technical Reviews

Reprocurement Costs

Out-of-Station Costs

Government Contract Requirements

Contract Administrator/Audit Personnel

Partial Termination of Prime Contractor

Government Overhead/General Administrative

The results and ideas of all of these reports and many others not listed in this short review were integrated into the component breakout model.

3.0 COMPUTATIONS

3.1 Computed costs: The computations of the costs associated with component breakout are separated into several natural areas that closely parallels the normal activity associated with the component breakout process. The process may include the following activities and all are included in the model in such a manner that they are utilized only when appropriate:

SCREENING

PRICE ANALYSIS

SOURCE APPROVAL

SOURCE DEVELOPMENT

SOURCE SELECTION

REVERSE ENGINEERING

FIRST ARTICLE ACCEPTANCE

CONTRACTING COSTS PRE-AWARD SURVEY GENERAL SPO COSTS

ADMINISTRATION AND AUDIT COSTS

SECURITY COSTS

EEO SUPPORT COSTS

SOCIO-ECONOMIC COSTS

WARRANTEE COSTS

TERMINATION COSTS

NEW EQUIPMENT COSTS

FACILITY MODIFICATION COSTS

TRANSPORTATION COSTS

SOLICITATION COSTS

TOTAL SPO COSTS

LOST OPPORTUNITY COSTS

SAVINGS

THEORETICAL SAVINGS

Each of these costs will be defined and the methodology of computing each costs will be described in the following sections.

3.2 General Assumptions of the Model Computations: Throughout the model several "constants" are used which are either accepted as constants by the government or enable the user to more easily use this computer model. Changing these values is explained in the Maintenance Manual.

3.2.1 Employee Grade: The civilian workforce that will normally be working on the breakout problem are of the professional general schedule grades of 7 to 15. It is inconceivable that a team of government personnel working on any portion of the breakout problem will average less than GS-7 or higher than GS-15. The users are asked in several sections to determine and enter the average grade of the team of personnel working on a particular portion of the breakout. The model will accept whole numbers from 7 to 15. The average grade can be computed by two different methods. The first method is accomplished by adding the grades and equivalent rank of the personnel in the activity and dividing by the number of personnel. The second or weighted method involves multiplying

the individual grade by the hours of involvement. Then summing these grade-hours and dividing by the total number of hours. The first method is more easily computed, but the latter may be more accurate.

Since all of the personnel on the Air Force teams will not be civilians, the model assumes that the military participants will be of the officer ranks equivalent to the GS grades from 7 to 15. The model assumes the following relationships between military and civilian grades and the civilian salaries as of January 1987.

GS-7.....$25,546

2nd Lt equivalent to GS-9....$31,255

1st Lt equivalent to GS-11...$33,985

Captain equivalent to GS-12..$36,889

Major equivalent to GS-13....$42,611

Lt Col equivalent to GS-13...$50,354

Col equivalent to GS-15....$59,234

These civilian salaries are step 5 on the General Schedule.

3.2.2 Available Working Hours: Although all government employees (and those outside of government also) work 2080 hours annually, the ASD Workload Assessment Model considers only 1760 hours as available for productive work. The difference between the actual available hours of 2080 and the productive hours of 1760 is accounted for in annual leave, sick leave, and other duties that are necessary for the smooth functioning of the organization but not normally considered "productive." The model

uses the 1760 hour figure for all manpower computations throughout.

3.2.3 Support Costs: Employee costs include more than just the basic salary and these are referred to as support costs in this study. These costs were determined by the 2750th Air Base Wing and the Aeronautical Systems Division at Wright-Patterson AFB, Ohio in 1986 and are shown below as a per person per year cost:

Civil Engineering Costs	$4,652.05
Material Costs	8,316.00
Equipment Costs	49.20
Material Markup Costs	4,602.54
Material Overhead Costs	277.31
G & A Costs	2,599.59
Travel Costs	6,060.00
Telephone Costs	956.10
TOTAL SUPPORT COSTS	$27,512.79

(per person/year)

3.2.4 Inflated Costs: Since the data on salaries, support costs, and certain other costs can be significantly changed with increases in the national inflation rate, an inflation rate function is included in the model. The user merely inputs the rate of increase (decrease) in the inflation index since January 1987, the date the data were determined.

3.2.5 Fringe Benefits: Fringe benefits must always be included in any cost analysis and this cost is included in the model. The user can either use the suggested fringe benefitrate

of 27.3 percent that was determined by the 2750th Air Base Wing of Wright-Patterson AFB, Ohio or the user may input any fringe benefit rate that is appropriate for the analysis. Note that the fringe benefit costs are added only to personnel costs.

3.3 Calculation Descriptions: The following sections explain exactly how each cost factor as defined earlier is determined.

3.3.1 Screening: The first activity associated with any component breakout is the screening of potential items. This is normally conducted at the prime contractor's facility, where the drawings, other documents, and contractor experts are available. The screening process identifies those items that can be broken out from the prime contract and procured from another source or sources. The rules for screening are spelled out Federal Acquisition Regulation Supplement 17.7202, the Defense Acquisition Regulation Paragraph 17.72-3, and the appropriate Air Force supporting regulations. The methodology for cost analysis is described in the Office of Management Circulars A-76 and A-109.

The screening calculation is based upon the hours of effort required and the average grades of the government participants. The calculations are:

Screening Hours = A1(1)*A3(1)*A4(1)*[(.01)*(40)*(1760/2080)]

A1(1)....number of personnel involved in screening

A3(1)....total weeks devoted to screening

A4(1)....percentage of time devoted to screening

(.01)*(40)*(1760/2080)....conversion factor, weeks to ....hours.

Screening Cost (without support costs) = Screening hours * SAS

SAS....Average salary of screening personnel

SAS is determined by the user entering the average grade of the screening team.

3.3.2 Price Analysis: A price analysis is used to develop validated prices for items which will be purchased in a sole source mode. These validated prices, often referred to as value based prices, are attempts to define what the item 'should cost' if it were acquired under competitive conditions. Price analysis reviews may be accomplished as either a Level I or Level II review. The Level I analysis is more of a limited review in which the last price paid is reviewed against the existing documentation to determine if that price is out of line with the value of the item. These Level I reviews are accomplished relatively quickly. A Level II analysis is much more extensive and includes a material, process, and labor estimates. For the model the Level I analysis usually requires about 1 hour and the Level II analysis about 12.5 hours. These estimates were based upon a data analysis accomplished by a contractor using AFLC provided data.

The price analysis is not only a function of the type of analysis but also the size, complication, and processes. The model assumes that these factors are normally explained by the use of engineering drawings and that the relative time required for the analysis can be a function of the number of class one

drawings for each component or item in the breakout. This number of drawings factor was used to provide variability to the normal times for the Level I and Level II analysis as described in the previous paragraph.

Price Analysis, Level I (PAI)

PAI Hours = No. of Class 1 drawings * (1/15) + .667

Price Analysis, Level II (PAII)

PAII Hours = No. of Class 1 Drawings * (12.5/15) + 8.33

The multipliers and additive portions of the above equations were developed by the authors to provide the variability about the AFLC average figures as defined by T.M. McCann in his Phase I Report.

Price Analysis cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

If a price analysis is not conducted relative to the subject component breakout items, then the model value is zero.

3.3.3 Source Approval: The source approval is the review of potential sources by reviewing the documentation submitted by the potential source independent of any specific request by the government. According to AFLC studies this generally requires 20 hours. Sometimes the source approval requires a visit by the government to the proposer's facilities. This would be the exception rather than the rule and estimates indicate that an average of 20 hours per person will be required at the contractor's facilities.

Source Approval Hours = A4(2) * 20 + A5(2) * A6(2) * 20

A4(2)....Number of source approvals

A5(2)....Number of plant visits

A6(2)....Number of plant visitors

Source Approval cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.4 Source Development: Source development usually includes actions taken by the Air Force to validate the capability of a second source for a noncompetitive item or a single source for an item which has no known sources. AFLC data indicate that the normal time for a complete source development averages 120 hours of government effort. In addition to this effort sometimes visits to the contractor's facilities is required. When these visits are necessary then about 20 hours per visitor will be required.

Source Development Hours = A2(6) * 120 + A3(6) * A4(6) * 20

A2(6)....Number of source developments

A3(6)....Number of plant visits

A4(6)....Number of visitors

Source Development Costs = Source Dev. Hrs. * Ave. Grade Salary.

Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.5 Source Selection: Source selection is the government (SPO in this case) activity of evaluating proposals to specific

government requests for proposals and selecting the source that provides the best option that meets all minimum government specifications. When participating in a source selection the government personnel normally devote 100 percent of their duty time to this activity. Source selection is a complicated process and it is estimated that the difficulty increases exponentially as a function of the number of proposals in the source selection and linearly as a function of the cost of the item(s) under consideration. Some AFLC data support these assumptions. See T.M. McCann Phase I Report.

Source Selection Hours = (1/2000) * A5(1) * SQR(A1(7))

(1/2000)....Constant

A5(1).....Prime cost of CBO item(s)

SQR.....Square Root

A1(7).....No. of proposals in source selection.

Source development cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.6 Reverse Engineering: Reverse engineering can range from simple substitution of government/industry specifications to when contractor specifications are missing or the government lacks rights in data for the contractor specifications for development of a major portion of the engineering documentation needed to produce the item. Two levels of reverse engineering have been defined by the government and are based upon the level of effort expended in the different levels. Normally Level I can

be accomplished by review of the available data and use of general engineering knowledge. Physical measuring and analysis of the part is not necessary. Level II on the other hand is more extensive than the Level I effort and includes measuring and detailed engineering analysis. Regardless, both levels are a function of the number of drawings to be reviewed and changed when appropriate. The authors' previous work indicates that Level I averages 0.1 hours per class 1 drawing and the Level II about 4 hours per drawing.

Reverse Engineering Hours (Level I) = 0.1 * No. Drawings

(Level II) = 4.0 * No. Drawings

Reverse engineering cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.7 First Article: First article is defined as the inspection and acceptance of the first article of a multiple item buy manufactured by the contractor. These first articles are used to demonstrate the capability of the contractor to manufacture the item(s) as specified by the contract. Typically production will not begin until this first article inspection is completed by the government and passed by the contractor. Literature reviews have indicated that the time required to accomplish a first article is a function of the square root of the total number of drawings that define the item(s). The following equations best fit the data that were available in early 1987.

First Article Hours = 20 + SQR(A2(4))

20.....Constant

SQR....Square root

A2(4)..Number of class 1 drawings.

First Article cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.8 Contracting Costs: The Workload Assessment Guide that was developed by the staff at the Aeronautical Systems Division at Wright-Patterson AFB, Ohio is used directly by the model to determine the contracting costs. This workload assessment model estimates the required manpower as a function of the total value of the procurement and the contracting methodology.

	Hours Required	
Contract Value	Sole Source	Competitive
$ 0 - $25K	55	55
$ 25 - $100K	125	125
$100 - $500K	150	250
$500 - $1M	245	335
$ 1M - $3.5M	375	1725
$3.5 - $10M	450	2600
$ 10 - $25M	520	2600
$ 25 - $100M	575	3875

Contracting cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.9 Pre-Award Survey: When a new source is being considered for award, it is necessary that the government make

an assessment of the responsibility and responsiveness of the offeror. The survey may require a visit to the offer's facility. Recent AFLC data indicate that 1/3 of new offerors will require a pre-award survey and that 40 percent of these will require an on site visit. The pre-award survey will require 5 of in-house assessment hours plus 6 hours per person for the on site visits.

Pre-Award Hours = HRS * A6(3) * A7(3)

HRS	0 if pre-award survey not required
	5 if pre-award required without visit
	11 if pre-award required with visit
A6(3)	Number of visits
A7(3)	Number of visitors.

Pre-Award Survey cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.10 General SPO CBO Costs: Component breakout is based upon the premise that the government will act as the integrator of the CBO items rather than the prime contractor. This entails but is not limited to the management of the CBO items, the engineering change proposals, the interfacing, new technical order changes, and all of the items normally accomplished by the logisticians in system manager roles. This integration/management function can be extremely time consuming for the SPO cadre. At best this function will be much more than just an irritant for the SPO.

It is believed that experienced SPO personnel will be able to estimate the level of activity of the SPO relative to the CBO items during the life of the CBO activity.

General SPO CBO Management Hours = A4(7) * A6(7)

A4(7)....Time of CBO effort in months

A6(7)....Level of SPO CBO activity

in average hours per month.

General SPO CBO management cost is determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.11 Administrative and Audit Costs: Based upon conversations with experienced Air Force personnel and data from the production of the F-16 the administrative and audit personnel costs can be estimated as a percentage of the total CBO item(s) cost. The logic for this approach is clear: larger contracts normally require more administrative support and more time for audits. CBO costs of less than $300K will result in only negligible offsetting costs due to administration and audit efforts over and above the normal workload of these personnel. This is true because according to the above referenced data most of the administrative and audit organizations can easily accept an additional 25 per cent increase in workload with no increase in personnel. However, those CBO efforts that exceed $300K will amount to a 2.5 percent increase in the component breakout overall costs.

Administrative and Audit costs are determined based upon the average grade of the personnel accomplishing this activity. Support costs and inflation are included in loaded and inflated costs figures respectively.

3.3.12 Security Costs: Security costs are generated by conducting investigations of personnel, security of manufacturing plants, DOD inspection at plants, and transportation security. This last cost generator was unavailable and was not included in the model. This data may become available and can be added at a later date. The above costs are generated as a function of the classification level from not classified to top secret and from the different clearances necessary to complete the CBO project at the new facilities. The costs of different clearances can be defined as a function of the total number of employees and the total number that will require clearances.

Security Costs = A6(6) * X + A7(6) * Y

A6(6)....Number of employees

A7(6)....No. of employees requiring clearances

Constant	Non Classified	Confidential	Secret	Top Secret
X	0	10	20	20
Y	0	50	200	500

The above constants were derived by O.L. Vincent.

3.3.13 Equal Opportunity Program Costs: Equal opportunity program or EEO costs are a function of the size of the organization and whether or not the new contractor has operating programs that meet the standards prescribe by current federal

law and Air Force regulations. When the new contractor does not have acceptable EEO programs and must comply then the cost is estimated usings the authors derived formula.

Equal Opportunity Program Costs = A6(6) * 10

A6(6)..Number of employees

$10....Constant cost per person.

3.3.14 Socio-Economic Program Costs: The socio-economic costs are associated with the costs of monitoring the programs such as small business initiatives, small disadvantaged business, labor surplus, etc. These costs are incurred by the Air Force when it gets involved in contracting with new contractors and assuring that none of the rules associated with these programs is violated. These programs were established by Federal Acquisition Regulation Subpart 19 paragraphs. This cost is generally quite small and is estimated by multiplying the number of employees in the new contractor facility by an authors' estimate of ten dollars.

3.3.15 Warrantee Costs: Warrantees are generally purchased when they are perceived to be in the best interest of the government. When these costs are included in the CBO price from the new contractor than the model accepts a zero value for warrantee costs. However, when not included in the CBO price but purchased by the government then this cost is entered into the model.

3.3.16 Termination Costs: These partial termination of the contract with the prime contractor generally include a termination cost to the government. When included in the prime

contract these termination costs must be included in the CBO offsetting cost calculations and is included in the model.

3.3.17 New Equipment Costs: Sometimes when a new contractor begins a new contract with the government it is necessary to purchase new manufacturing equipment. When the cost of this new equipment is cost to the government then this cost should be included in the computation of the CBO offsetting costs.

3.3.18 Facility Modification Costs: This is similar to new equipment costs but refers to the modification of the facility. When the government incurs a cost of this nature it must be included in the model calculations.

3.3.19 Transportation Costs: Transportation costs are generated by the cost of transporting the CBO item(s) from the new contractor facility to the contractor who is responsible for integrating the item(s) into the final product. The costs of transporting items can vary according to the weight, volume, mode of transportation, and urgency. The model assumes that all CBO item(s) are transported under non-urgent conditions by motor freight.

Under 1000 pounds....

Transportation costs = (1.1 - 0.0083636 * A3(4)) * A3(4) * A5(5))/(100)

Over 1000 pounds....

Transportation costs = 1108.688 + (9.269399 * (A3(4)/100)) + (0.082285 * A5(5))

A3(4)....Distance between new contractor and final integrator contractor facility

A5(5)....Weight of item(s).

3.3.20 Solicitation Costs: The solicitation costs are merely the cost of reproducing the solicitation sets for potential bidders. Obviously the actual solicitation costs would include manpower, facility, and several other costs. However, these costs are included in previous cost calculations. An Aeronautical Systems Division estimator for solicitation set costs is $10 per set.

3.3.21 SPO Total Costs: The SPO total cost is the summation of screening, price analysis, source approval, source development, source selection, reverse engineering, first article, contracting, general management, and pre-award survey costs. This calculation section begins by computing the total hours that the SPO will devote to CBO. This is then converted to costs associated with salaries. This cost is then increased by adding the support costs and this is then inflated for the final loaded and inflated SPO cost. The model output will reflect all of the costs mentioned in this section.

3.3.22 Lost Opportunity Costs: Lost opportunity costs are defined as the cost of devoting SPO personnel time to CBO rather than to the other regular or non-CBO responsibilities. It has long been accepted by management experts that it is poor management technique to devote more time to the low cost items rather than to devote this time to the high price items. In other words one should devote his/her time to those activities

that will have the maximum payoff. In the CBO-SPO situation the CBO may be the "low priced" items. Although this is generally the belief of the SPO cadre, it may not always be true. The model enables the user to determine this lost opportunity cost. When the cost appears negative in the model it means that the CBO effort is more time cost effective that the normal SPO activities. The lost opportunity cost is determined by evaluating the average cost responsibility of the SPO cadre for their normal SPO responsibilities and the average cost responsibility of the SPO cadre for their CBO cost responsibilities. The first factor is calculated by dividing the total budget of the SPO by the manhours available. This results in a dollars per hour rate for normal SPO operations. The second factor is calculated by dividing the new contractor's cost of the CBO item(s) by the hours devoted in CBO effort as computed as described in the previous section. The lost opportunity cost is then determined by subtracting the first from the second factor and multiplying this difference by the total number of SPO hours devoted to CBO.

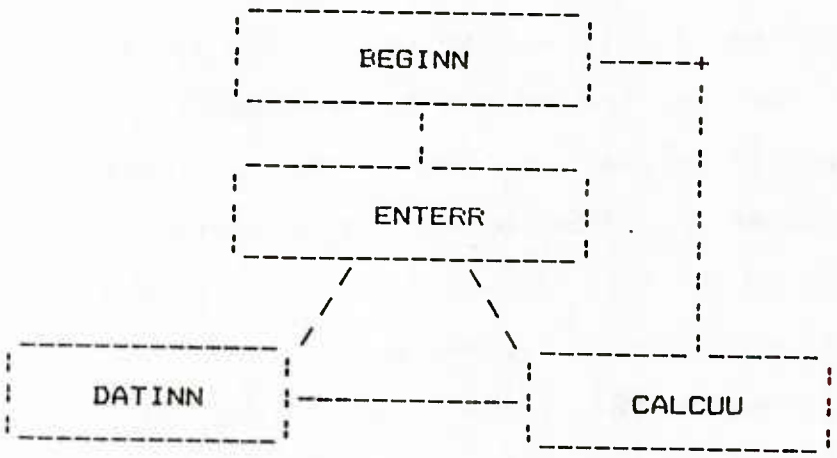
3.3.23 Savings: The savings are computed for both the uninflated-unsupported savings and the total savings. The savings is computed by subtracting the original cost of the CBO item(s) from the prime from the newly computed cost which includes both the new contractor cost to the government and the total government costs associated with the CBO item(s).

3.3.24 Theoretical Savings: The theoretical savings is computed by subtracting the lost opportunity costs from the

appropriate savings. When lost opportunity is positive (indicating that the CBO effort is not as cost effective as the normal SPO activity), then the theoretical savings will be less than the savings.

4.0 The Basics of the Model

4.1 General: The computer disc that is provided with this manual contains the component breakout model (CBOM) in two forms, compiled and uncompiled basic programs. Each will provide the user with the same screen and printer outputs. The CBOM is composed of the following sub-programs and interact with each other as shown in Figure 1.



NOTE: The uncompiled subprograms end in double letters: NN, RR and UU. The compiled versions end in NY, RY, and UY.

Figure 1. Submodels.

4.1.1 Subprograms:

```
**********************************************
*                                            *
*              WARNING                       *
*                                            *
*    Assure that CapsLock is on.  Use        *
*    only capital letters with the model.    *
*                                            *
**********************************************
```

4.1.1.1 BEGINN (BEGINY): This is the subprogram that includes the model assumptions and general help information. This subprogram automatically loads the ENTER (ENTERY) file for data entry or changing.

4.1.1.2 ENTERR (ENTERY): This is the subprogram that enables the user to enter data concerning the specific component breakout scenario. This subprogram includes the capability to view the data and data screens, to create new data files, and to modify previously created data files. Each data entry question is explained by use of individual help screens for each question. Upon completion of the data entry the user can either view the entered data or begin the calculations.

4.1.1.3 DATINN (DATINY): This subprogram can be used to access each of the data files on the floppy disc and to display these data with the appropriate questions on the screen and on the printer. Upon completion of the data display the subprogram automatically loads and runs the calculations subprogram.

4.1.1.4 CALCUU (CALCUY): This subprogram is used to calculate the costs of component breakout. The costs for each activity associated with component breakout is tabulated. The lost

opportunity costs, which are the difference between the the budget per hour per person on the prime contract minus the difference between the prime CBO cost and the new contractor cost divided by the hours and persons required for the CBO effort. This subprogram provides the user with the options of printing the results or viewing them on the screen. Upon the completion of the results output the user can go to the BEGINN (BEGINY), the DATINN (DATINY), the ENTERR (ENTERY), restart the calculations, or stop the computer operation.

4.1.2 Non-Compiled Models: The non-compiled models require that BASIC be loaded on the personal computer. First load BASIC. After the normal BASIC prompts appear place the CBOM Disc into the A drive. Now type LOAD "BEGINN",R (Ret). The model will now prompt the user with all the necessary information to intelligently operate the CBOM. Should the user wish to access a particular submodel, merely type LOAD "submodel name" and Return.

4.1.3 Compiled Models: The compiled models can be accessed from the DOS prompt, A>. With the computer on, place the CBOM disc in the A drive. Assure the prompt is A>. Now type BEGINY (Return). The model will now prompt the user with all the necessary information to intelligently operate the CBOM. Access to the other submodels is possible by typing the appropriate name after the DOS prompt A>.

4.1.4 Input Data: The data that is input into the model via the ENTERR subprogram can be view either on the screen or on the printer. Appendix C.1 shows the printed output and it should be obvious that the entries are generally self-explanatory. Should

the user require an expanded definition they are included in the help information in the ENTERR subprogram.

4.1.5 Model Results: Appendix C.2 depicts the output of the model for a test run. This figure reflects the hours used in each activity, the cost, the inflated costs, the costs of the fringes associated with costs of employee benefits, and the total costs. These total costs are the summation of the inflated costs and the fringe benefits. Note that this output includes the run name (testl.dat in this case) and the date of the run.

The following are short definitions of the other data on Appendix C.2:

SCREENING	The identification and selection of the items for CBO.
PRICE ANALYSIS	The act of estimating a fair price for the CBO.
SOURCE APP	This is the act of approving new sources that can supply the needed CBO items.
SOURCE DEV	This is the act of developing new sources.
SOURCE SEL	This is the act of selecting a new source.
REVERSE ENG	This is reverse engineering, a technique for engineering from the final item backwards.
FIRST ARTIC	This is the first article evaluation.
CONTRACTING	This is the total SPO contracting activity.
GENERAL SPO	This is the general SPO cost for the CBO items.
PRE-AWD SVY	This is the pre-award survey.

SPO TOTALS	This is the total of the SPO costs for the CBO items in the various columns (the summation of the columns.)
SECURITY	This is the cost of CBO security.
EEO SUPPORT	This is the cost of equal opportunity actions associated with the CBO.
SOC-ECON CST	This is the socio-economic costs associated with the CBO.
WARRANTEE CST	This is the cost of warrantees.
TERMIN CST	This is the termination cost of the prime.
NEW EQUIP	This is the cost of purchasing new equipment by the new contractor.
FAC MOD CST	This is the cost of modifying facilities.
ADMIN & AUD	This is the costs associated with administrative and audit cost associated with CBO.
TRANSPORTATION	This is the cost of transporting the CBO from the new contractor facility to the prime.
SOLICITATION	This is the cost of the solicitation preparation.
TOTAL CBO COST	This is the summation of the column costs and reflects the total cost of the CBO items to the government.

SAVINGS — This is the savings to the government and is determined by subtracting the TOTAL CBO COST from the difference between the prime cost and the new contractor cost.

LOST OPT COST — This is the the difference between the average value of SPO personnel's time devoted to CBO rather than the SPO prime contract.

THEO SAVINGS — This is the theoretical savings that includes the SAVINGS and the LOST OPT COST.

4.2 Equipment Required: The Component Breakout Model runs on the IBM Personal Computer or the Zenith 100, 148 or other IBM compatible equipment with a minimum of 128K of RAM. The DOS 4.2 or later versions may be required on other than IBM equipment.

4.3 Personnel Requirements: Users need not be familiar with BASIC programming, however, they should be generally familiar with the machine they will use. It is imperative that users be very familiar with the operation of the System Program Office that is using the model to determine the economic feasibility of component breakout. Questions that must be answered in the model will require intimate knowledge of the entire CBO operation.

5.0 Messages:

5.1 Machine Error Messages: Refer to your computer manuals and specifically the operating system and BASIC error message sections.

5.2 Model Error Messages: These messages are caused by an error in the operation of the model. The user can refer to the

machine error messages noted in 5.1, above. The following is a listing of the most common error messages that the users may see.

DISK FULL	all storage space on the disc is used. Make another copy of CBOM and begin again using the copy.
FILE ALREADY EXISTS	select a new file name and continue.
FILE NOT FOUND	a file that does not exist was called. Check the file name.
OUT OF DATA	print out the DATIN(N or X) file and check for errors.

6.0 Maintenance

6.1 Non-Compiled Subprograms: The non-compiled subprograms can be modified using normal BASIC procedures as outlined in the BASIC manuals that are provided with the BASIC software. It is assumed that any person that attempts to modify these subprograms should be literate in the BASIC language and therefore, the standard BASIC procedures will not be included in this manual.

6.1.1 BEGINN: Both help and assumption information can be altered using normal BASIC procedures. However, should either be expanded significantly, assure that only one screen's worth of data is presented for each screen. Further modifications to the model may include the option to access any of the other three subprograms rather than just the ENTERR subprogram. This will require the development of an additional screen. If the initial welcome screen remains on the screen too long or not long

enough, change the 2000 value on line 460 to less or more, respectively.

6.1.2 ENTERR: The ENTERR program contains all of the screens that are required to enter the model data. The model currently contains seven screens. If it is necessary to increase the number of screens it will not be necessary to increase the dimension statements, which are set to accept nine screens. The model is currently structured to accept two additional screens or a total of sixteen additional questions. This can be accomplished by deleting the GOTO on line 6140. If any question is changed so that the response is different (y/n versus a number response), then it will be necessary to change the GOSUB of the appropriate entry. If the data input is not selected for viewing, then this subprogram will automatically open the calculations (CALCUU) model. Future modifications of the CBOM may include changes to these options for the ENTERR subprogram.

6.1.3 CALCUU: The CALCUU subprogram contains all of the equations and parameters that with the entered data computes the results. No doubt during Phase II some of these equations will have to be modified as better information is made available to the authors of the CBOM. If any questions are changed in ENTERR, then it may be necessary to alter the value conversions listed on lines 620 to 750. Other changes can be made using normal BASIC procedures.

6.1.4 DATINN: The DATINN program contains the questions and the data input in a form easy to read. This program is simple and can be changed using normal BASIC procedures.

6.1.5 Data Files: The data files are produced whenever the ENTERR subprogram is executed. As more and more data files are added to the disc it can become filled. However, before this occurs more files will be included on the disc than can be properly displayed each time the user must identify a data file. When this occurs copy the data files to a new disc and then erase these files from your CBOM disc. If these files are needed later they can then be copied to the CBOM disc.

6.2 Compiled Subprograms: All that has been stated above concerning the non-compiled subprograms and data files will have to be accomplished if the present subprograms are to be modified. Once the above has been accomplished then the normal compiling functions will have to be completed in order to have a current compiled version of the CBOM. Unfortunately, since there are small differences in the compiled and non-compiled BASIC programs, it has been necessary to identify the non-compiled versions with the double letter endings for the program names and the Y ending for the compiled or to be compiled subprograms. This means that changes made to the non-compiled programs will have to be also changed on the to be compiled programs. In addition, be aware that the CBOM is provided in two compiled versions, one for the IBM and IBM compatibles and one for the Zenith personal computers that are not IBM compatible. Each disc is properly marked to indicate type of compilation.

6.3 Maintenance Manual: The Maintenance Manual for the Component Breakout Model can be obtained from PJSA, Inc., 1390

Rawlings Dr., Fairborn, Ohio 45324, (513) 878-4586 or Universal Energy Systems, Inc., 4401 Dayton-Xenia Rd., Dayton, Ohio 45432, (513) 426-6900.

7.0 Model Listings

The model listings are included on the following pages. These include complete computer listings of all of the programs, screen designs, input data, and output data examples.

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APPENDICES

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A. COMPUTER PROGRAMS

A.1 BEGINN

```
10 REM  .....BEGINN.BAS.....
  REM THIS IS THE START OF THE MAIN PROGRAM
30 REM
40 KEY OFF
50 REM   ***********************************************************************
60 REM   *                                                                     *
70 REM   *              COMPONENT BREAKOUT COST ESTIMATION MODEL               *
80 REM   *                                                                     *
90 REM   *       This model was developed by PJSA, Inc. under sub-contract     *
100 REM   *       with  Universal  Energy Systems, Inc. for the  Air  Force     *
110 REM   *       Business Research Management Center in 1986-1987.
120 REM  *                                                                     *
130 REM  *       The model is  suplemented  with both a  User's Manual and     *
140 REM  *       and a Maintenance Manual.                                     *
150 REM  *                                                                     *
  0 REM  ***********************************************************************
170 CLS
180 KEY OFF
190 REM   THIS IS A SQUARE SCREEN PROGRAM
200 CLS
210 LOCATE 3,5
220 PRINT "   ------------------------------------------------------------
   "
230 LOCATE 4,5
240 PRINT "  ////////////////////////////////////////////////////////////,
///!"
250 LOCATE 5,5
260 PRINT " ////////////////////////////////////////////////////////////,
///!"
270 LOCATE 6,5
280 PRINT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!/!"
290 FOR I = 7 TO 23
300 LOCATE I,5
310 PRINT "!!
!!/!"
320 NEXT I
330 LOCATE 8,5
340 PRINT "!!   WELCOME TO
  '!"
350 LOCATE 13,5
```

```
360 PRINT "¦¦                               COMPONENT BREAKOUT
¦¦/¦"
370 LOCATE 17,5
380 PRINT "¦¦                                          OFFSETTING COST
¦¦/¦"
390 LOCATE 21,5
400 PRINT "¦¦                                                    MODELING
¦¦/¦"
410 LOCATE 22,5
420 PRINT "¦¦   by PJSA,Inc.                                                   JAN 87
¦¦/¦"
430 LOCATE 24,5
440 PRINT "¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦¦
¦¦/"
450 BEEP
460 I = 1: FOR I = 1 TO 2000:NEXT:CLS
470 REM  THIS IS THE MODEL ASSUMPTIONS SECTION
480 CLS
490 REM
500 LOCATE 10,10
510 PRINT "*******************************************************************"
520 LOCATE 11,10
530 PRINT "*                                                                 *"
540 LOCATE 12,10
550 PRINT "*        DO YOU WISH TO VIEW THE MODEL ASSUMPTIONS? (Y/N)         *"
560 LOCATE 13,10
570 PRINT "*                                                                 *"
580 LOCATE 14,10
590 PRINT "*******************************************************************"
600 LOCATE 17,30:BEEP
610 PRINT "NOTE::: Y MEANS YES"
620 LOCATE 19,30
630 PRINT "          N MEANS NO"
640 LOCATE 12,68:PRINT "> "
650 C$=INKEY$:IF C$="" THEN GOTO 650 ELSE GOTO 660
660 IF C$="Y" THEN GOTO 690 ELSE GOTO 670
670 IF C$="N" THEN GOTO 980 ELSE GOTO 680
680 GOTO 640
690 REM
700 REM THIS IS THE MODEL ASSUMPTION DATA SCREEN SECTION
710 KEY OFF:CLS
720 LOCATE 3,25:PRINT "THESE ARE THE MODEL ASSUMPTIONS:"
730 LOCATE 5,10:PRINT "THE DESIGN IS STABLE."
740 LOCATE 7,10:PRINT "THE DATA PACKAGE IS AVAILABLE."
750 LOCATE 9,10:PRINT "QUALITY AND RELIABILITY OF COMPONENT CAN BE RESOLVED"
760 LOCATE 10,15:PRINT "WITHOUT END ITEM CONTRACTOR SUPPORT."
770 LOCATE 12,10:PRINT "TECHNICAL SUPPORT IS MINIMAL OR CAN BE FURNISHED BY"
780 LOCATE 13,15:PRINT "THE GOVERNMENT."
790 LOCATE 15,10:PRINT "LOGISTICS PROBLEMS ARE MINIMAL."
```

```
800 LOCATE 17,10:PRINT "ADMINISTRATION, MANAGEMENT, AND PERFORMANCE OF THE "
810 LOCATE 18,15:PRINT "OF THE END ITEM CONTRACTOR NOT AFFECTED."
820 LOCATE 20,10:PRINT "DELIVERY OF THE END ITEM NOT JEOPARDIZED."
830 LOCATE 25,25:PRINT "PRESS ANY KEY TO CONTINUE...."
840 A$=INKEY$:IF A$="" THEN GOTO 840 ELSE GOTO 850
850 CLS:LOCATE 3,25:PRINT "THESE ARE THE MODEL ASSUMPTIONS (CONT.)"
860 LOCATE 5,10:PRINT "ADVANCE PROCUREMENT FUNDS ARE AVAILABLE, IF REQUIRED."
870 LOCATE 7,10:PRINT "ANOTHER SOURCE IS AVAILABLE TO PROVIDE COMPONENT."
880 LOCATE 9,10:PRINT "THE COMPONENT HAS BEEN OR MAY BE A GFE ITEM."
890 LOCATE 11,10:PRINT "THE GOVERNMENT WILL ASSUME THE ROLE OF PRIME CONTRACTOR

900 LOCATE 12,15:PRINT "FOR THIS COMPONENT."
910 LOCATE 14,10:PRINT "A SIGNIFICANT COST SAVINGS WILL RESULT FROM THIS "
920 LOCATE 15,15:PRINT "COMPONENT BREAKOUT."
930 LOCATE 17,15:PRINT "SOURCE---ASPR 1-326.4B.
940 LOCATE 25,25
950 PRINT "PRESS ANY KEY TO CONTINUE......."
960 A$=INKEY$:IF A$="" THEN 960 ELSE GOTO 980
970 KEY OFF
980 REM  THIS IS THE MODEL ASSUMPTIONS SECTION
990 CLS
1000 REM
1010 LOCATE 10,10
1020 PRINT "*************************************************************************"
  30 LOCATE 11,10
1040 PRINT "*                                                                       *"
1050 LOCATE 12,10
1060 PRINT "*         DO YOU WISH TO VIEW THE HELP INFORMATION? (Y/N)               *"
1070 LOCATE 13,10
1080 PRINT "*                                                                       *"
1090 LOCATE 14,10
1100 PRINT "*************************************************************************"
1110 LOCATE 17,30:BEEP
1120 PRINT "NOTE:::: Y MEANS YES"
1130 LOCATE 19,30
1140 PRINT "          N MEANS NO"
1150 LOCATE 12,68: PRINT "> "
1160 D$=INKEY$:IF D$="" THEN GOTO 1160 ELSE GOTO 1170
1170 IF D$="Y" THEN GOTO 1200 ELSE GOTO 1180
1180 IF D$="N" THEN GOTO 1370 ELSE GOTO 1190
1190 GOTO 1150
```

```
1200 REM
1210 REM THIS IS THE MODEL HELP INFORMATION SCREEN SECTION
1220 KEY OFF:CLS
1230 LOCATE 3,20:PRINT "THIS IS THE GENERAL HELP INFORMATION SECTION"
1240 LOCATE 4,20:PRINT "^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^"
1250 LOCATE 6,15:PRINT "THIS MODEL ASSISTS IN THE COMPUTATION OF THE OFFSETTING
1260 LOCATE 8,15:PRINT "AND LOST OPPORTUNITY COSTS OF COMPONENT BREAKOUT."
1270 LOCATE 11,15:PRINT "THE MODEL IS USER FRIENDLY AND WILL PROMPT THE USER AT
1280 LOCATE 13,15:PRINT "EACH STEP.  GENERALLY THE CARRIAGE RETURN NEED NOT BE
1290 LOCATE 15,15:PRINT "PRESSED WHEN ANSWERING QUESTIONS Y (FOR YES) OR N (FOR
1300 LOCATE 17,15:PRINT "NO).  HOWEVER, WHEN ENTERING DATA IT WILL BE NECESSARY
1310 LOCATE 19,15:PRINT "TO PRESS THE CARRIAGE RETURN."
1320 LOCATE 22,15:PRINT "HELP INFORMATION IS AVAILABLE FOR EACH DATA ENTRY"
1330 LOCATE 24,15:PRINT "QUESTION."
1340 LOCATE 25,25
1350 PRINT "PRESS ANY KEY TO CONTINUE......."
1360 A$=INKEY$:IF A$="" THEN GOTO 1360 ELSE GOTO 1370
1370 REM
1380 CLS
1390 LOCATE 15,25
1400 PRINT "THE MODEL IS LOADING..."
1410 LOCATE 20,30
1420 PRINT "PLEASE BE PATIENT...."
1430 RUN  "ENTERY"
1440 END
```

A. COMPUTER PROGRAMS

A.2 ENTERR

```
10 REM .....ENTERR.BAS.....
20 REM .....THIS IS THE DATA ENTRY PROGRAM.....
30 REM
40 DIM A1(9),A2(9),A3(9),A4(9),A5(9),A6(9),A7(9),A8(9)
50 DIM A1T$(9),A2T$(9),A3T$(9),A4T$(9),A5T$(9),A6T$(9),A7T$(9),A8T$(9)
55 DIM A1$(9),A2$(9),A3$(9),A4$(9),A5$(9),A6$(9),A7$(9),A8$(9)
60 REM
70 KEY OFF
80 CLS
90 LOCATE 3,10
100 PRINT "*************************************************************************"
110 LOCATE 4,10
120 PRINT "*                                                                       *"
130 LOCATE 5,10
140 PRINT "*              THE FOLLOWING FILES ARE AVAILABLE                        *
150 LOCATE 6,10
160 PRINT "*                                                                       *"
170 LOCATE 7,10
180 PRINT "************************************************************************* "
190 LOCATE 9,5:FILES "*.DAT"
200 LOCATE 18,15:PRINT "NOTE:  ENTER A 4 LETTERS FOLLOWED BY 1 NUMBER"
210 LOCATE 25,15:PRINT "                                                          "
220 LOCATE 19,22:PRINT "FOLLOWED BY .DAT (PLUS CARRIAGE RETURN)"
230 LOCATE 21,20:PRINT "EXAMPLES: PROD4.DAT   EXAM8.DAT   TEST5.DAT"
240 LOCATE 15,59:COLOR 0,7:PRINT"           ":COLOR 7,0
250 LOCATE 15,5:BEEP
260 INPUT "WHAT PROGRAM DO YOU WISH TO RUN (PROGRAM NAME/NUMBER)";NAMNO$
270 LOCATE 23,15:PRINT "IS THIS A NEW PROGRAM ? (Y/N)":LOCATE 23,47
280 COLOR 0,7:PRINT "  ":COLOR 7,0
290 A$=INKEY$:IF A$="" THEN GOTO 290 ELSE GOTO 300
300 IF A$="N" THEN GOTO  310 ELSE GOTO 340
310 NOLD$="N"
320 GOSUB 930
330 GOTO 380
340 IF A$="Y" THEN GOTO  370 ELSE GOTO 350
350 BEEP:GOTO 270
360 REM
370 NOLD$="Y"
380 REM  THIS IS THE BEGINNING OF THE QUESTIONING .....
390 OPEN NAMNO$ FOR OUTPUT AS #1
400 REM   THIS IS THE START OF SCREEN 1.
410 CLS
420 K=1:HP=0:NOM=0
430 GOSUB 2870
440 LOCATE 3,5
450 PRINT "|                PLEASE ANSWER THE FOLLOWING QUESTIONS
|"
460 LOCATE  8, 5
470 PRINT "1. HOW MANY AF PERSONNEL CONDUCTED SCREENING?"
480  LOCATE  8,70:COLOR 0,7:PRINT "     ":COLOR 7,0
490 LOCATE 10, 5
```

```
500 PRINT "2. WHAT IS THEIR AVERAGE GS GRADE?"
510  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
520 LOCATE 12, 5
530 PRINT "3. HOW MANY WEEKS DID THE SCREENING REQUIRE?"
540 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
550 LOCATE 14, 5
560 PRINT "4. SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?"
570 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
580 LOCATE 16, 5
590 PRINT "5. WHAT WAS THE PRIME'S PRICE FOR CBO ITEMS?"
600 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
610 LOCATE 18, 5
620 PRINT "6. WHAT IS THE NEW CONTRACTOR'S PRICE FOR THE ITEMS?"
630 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
640 LOCATE 20, 5
650 PRINT "7. WHAT IS THE INFLATION RATE (SEE HELP SCREEN)?"
660 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
670 LOCATE 22, 5
680 PRINT "8. WHAT IS THE FRINGE BENEFIT RATE (SEE HELP SCREEN)?"
690 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
700 GOSUB 2660
710 REM
720 IF NOLD$ = "N" THEN GOTO 730 ELSE GOTO 740
730 GOSUB 1020
740 GOSUB 1990
750 GOSUB 2070
760 GOSUB 2150
770 GOSUB 2220
780 GOSUB 2300
790 GOSUB 2380
800 GOSUB 2460
810 GOSUB 2540
820 GOSUB 2760
830 IF B$="N" GOTO 400
840 PRINT #1,A1$(K)
850 PRINT #1,A2$(K)
860 PRINT #1,A3$(K)
870 PRINT #1,A4$(K)
880 PRINT #1,A5$(K)
890 PRINT #1,A6$(K)
900 PRINT #1,A7$(K)
910 PRINT #1,A8$(K)
920 GOTO 2940
930 REM        THIS SUBROUTINE ENTERS PREVIOUS DATA INTO THE MODEL
940 OPEN NAMNO$ FOR INPUT AS #1
950 FOR I = 1 TO 7
960 INPUT #1,A1$(I),A2$(I),A3$(I),A4$(I),A5$(I),A6$(I),A7$(I),A8$(I)
970 REM IF EOF(1) THEN END
980 NEXT
990 CLOSE #1
```

```
 900 RETURN
1010 REM        THIS IS THE SUBROUTINE END.............
1020 REM
1030 REM THIS IS THE INPUT DATA FOR THE SCREEN
1040 REM
1050 REM ON HP GOTO 920,930,940,950,960,970,980,990
1060 LOCATE 8,70:PRINT A1$(K)"      "
1070 LOCATE 10,70:PRINT A2$(K)"      "
1080 LOCATE 12,70:PRINT A3$(K)"      "
1090 LOCATE 14,70:PRINT A4$(K)"      "
1100 LOCATE 16,70:PRINT A5$(K)"      "
1110 LOCATE 18,70:PRINT A6$(K)"      "
1120 LOCATE 20,70:PRINT A7$(K)"      "
1130 LOCATE 22,70:PRINT A8$(K)"      "
1140 REM
1150 RETURN
1160 REM THIS IS THE START OF THE NEW DATA INPUT......
1170 REM
1180 REM    THIS IS THE YES/NO RESPONSE SECTION.......
1190 REM
1200 REM  THIS IS THE START OF INPUT #1
1210 A1T$(K)=A1$(K)
1220 LOCATE 8,68:INPUT;"> ",A1$(K)
1230 IF A1$(K) = "N" GOTO 1280
1240 IF A1$(K) = "Y" GOTO 1280
1250 IF A1$(K) = "" GOTO 1270
1260 BEEP:GOTO 1200
1270 A1$(K) = A1T$(K)
1280 RETURN
1290 REM
1300 REM  THIS IS THE START OF INPUT #2
1310 A2T$(K)=A2$(K)
1320 LOCATE 10,68:INPUT;"> ",A2$(K)
1330 IF A2$(K) = "Y" GOTO 1380
1340 IF A2$(K) = "N" GOTO 1380
1350 IF A2$(K) = "" GOTO 1370
1360 BEEP:GOTO 1320
1370 A2$(K)=A2T$(K)
1380 RETURN
1390 REM
1400 REM  THIS IS THE START OF INPUT #3
1410 A3T$(K)=A3$(K)
1420 LOCATE 12,68:INPUT;"> ",A3$(K)
1430 IF A3$(K) = "Y" GOTO 1480
1440 IF A3$(K) = "N" GOTO 1480
1450 IF A3$(K) = "" GOTO 1470
1460 BEEP:GOTO 1420
1470 A3$(K)=A3T$(K)
1480 RETURN
1490 REM
```

```
1500 REM  THIS IS THE START OF INPUT #4
1510 A4T$(K)=A4$(K)
1520 LOCATE 14,68:INPUT;"> ",A4$(K)
1530 IF A4$(K) = "Y" GOTO 1580
1540 IF A4$(K) = "N" GOTO 1580
1550 IF A4$(K) = "" GOTO 1570
1560 BEEP:GOTO 1520
1570 A4$(K)=A4T$(K)
1580 RETURN
1590 REM
1600 REM  THIS IS THE START OF INPUT #5
1610 A5T$(K)=A5$(K)
1620 LOCATE 16,68:INPUT;"> ",A5$(K)
1630 IF A5$(K) = "Y" GOTO 1680
1640 IF A5$(K) = "N" GOTO 1680
1650 IF A5$(K) = "" GOTO 1670
1660 BEEP:GOTO 1620
1670 A5$(K)=A5T$(K)
1680 RETURN
1690 REM  THIS IS THE START OF INPUT #6
1700 A6T$(K)=A6$(K)
1710 LOCATE 18,68:INPUT;"> ",A6$(K)
1720 IF A6$(K) = "Y" GOTO 1770
1730 IF A6$(K) = "N" GOTO 1770
  40 IF A6$(K) = "" GOTO 1760
1750 BEEP:GOTO 1710
1760 A6$(K)=A6T$(K)
1770 RETURN
1780 REM
1790 REM  THIS IS THE START OF INPUT #7
1800 A7T$(K)=A7$(K)
1810 LOCATE 20,68:INPUT;"> ",A7$(K)
1820 IF A7$(K) = "Y" GOTO 1870
1830 IF A7$(K) = "N" GOTO 1870
1840 IF A7$(K) = "" GOTO 1860
1850 BEEP:GOTO 1810
1860 A7$(K)=A7T$(K)
1870 RETURN
1880 REM
1890 REM  THIS IS THE START OF INPUT #8
1900 A8T$(K)=A8$(K)
1910 LOCATE 22,68:INPUT;"> ",A8$(K)
1920 IF A8$(K) = "Y" GOTO 1970
1930 IF A8$(K) = "N" GOTO 1970
1940 IF A8$(K) = "" GOTO 1960
1950 BEEP:GOTO 1910
1960 A8$(K)=A8T$(K)
1970 RETURN
1980 REM
  70 REM THIS IS THE START OF INPUT #1
```

```
2000 A1T$(K)=A1$(K)
2010 LOCATE 8,68:INPUT;"> ",A1$(K)
2020 IF A1$(K)="" GOTO 2040
2030 GOTO 2050
2040 A1$(K)=A1T$(K)
2050 RETURN
2060 REM
2070 REM THIS IS THE START OF INPUT #2
2080 A2T$(K)=A2$(K)
2090 LOCATE 10,68:INPUT;"> ",A2$(K)
2100 IF A2$(K)="" GOTO 2120
2110 GOTO 2130
2120 A2$(K)=A2T$(K)
2130 RETURN
2140 REM
2150 REM THIS IS THE START OF INPUT #3
2160 A3T$(K)=A3$(K)
2170 LOCATE 12,68:INPUT;"> ",A3$(K)
2180 IF A3$(K)="" GOTO 2200
2190 GOTO 2210
2200 A3$(K)=A3T$(K)
2210 RETURN
2220 REM THIS IS THE START OF INPUT #4
2230 A4T$(K)=A4$(K)
2240 LOCATE 14,68:INPUT;"> ",A4$(K)
2250 IF A4$(K)="" GOTO 2270
2260 GOTO 2280
2270 A4$(K)=A4T$(K)
2280 RETURN
2290 REM
2300 REM THIS IS THE START OF INPUT #5
2310 A5T$(K)=A5$(K)
2320 LOCATE 16,68:INPUT;"> ",A5$(K)
2330 IF A5$(K)="" GOTO 2350
2340 GOTO 2360
2350 A5$(K)=A5T$(K)
2360 RETURN
2370 REM
2380 REM THIS IS THE START OF INPUT #6
2390 A6T$(K)=A6$(K)
2400 LOCATE 18,68:INPUT;"> ",A6$(K)
2410 IF A6$(K)="" GOTO 2430
2420 GOTO 2440
2430 A6$(K)=A6T$(K)
2440 RETURN
2450 REM
2460 REM THIS IS THE START OF INPUT #7
2470 A7T$(K)=A7$(K)
2480 LOCATE 20,68:INPUT;"> ",A7$(K)
2490 IF A7$(K)="" GOTO 2510
```

```
2500 GOTO 2520
2510 A7$(K)=A7T$(K)
2520 RETURN
 530 REM
2540 REM THIS IS THE START OF INPUT #8
2550 A8T$(K)=A8$(K)
2560 LOCATE 22,68:INPUT;"> ",A8$(K)
2570 IF A8$(K)="" GOTO 2590
2580 GOTO 2600
2590 A8$(K)=A8T$(K)
2600 RETURN
2610 REM
2620 LOCATE 25,25
2630 PRINT "PRESS ANY KEY TO RETURN TO SCREEN."
2640 A$=INKEY$: IF A$="" THEN GOTO 2640 ELSE GOTO 2650
2650 RETURN
2660 REM
2670 REM THIS IS THE HELP SUBROUTINE
2680 LOCATE 6,10:COLOR 0,7
2690 PRINT "     FOR SPECIFIC HELP TYPE QUESTION NO. OR N FOR NO HELP     "
2700 COLOR 7,0:BEEP
2710 A$=INKEY$: IF A$="" THEN GOTO 2710 ELSE GOTO 2720
2720 IF A$="N" THEN GOTO 2742
2730 HP = VAL(A$)
2740 IF (HP>0) AND (HP<9) THEN GOTO 7480 ELSE GOTO 2680
2742 LOCATE 6,10
2744 PRINT ">>>>  TYPE IN TOTAL CHANGE  YOU ONLY GET WHAT IS TYPED  <<<<    "
2746 COLOR 7,0
 750 RETURN
2760 REM
2770 REM THIS IS THE SCREEN REVIEW CHECK & DATA TO FILE.....
2780 LOCATE 24,25
2790 COLOR 0,7:PRINT "    IS DATA INPUT CORRECT? (Y/N)    ":COLOR 7,0
2800 COLOR 7,0:B$=INKEY$:IF B$="" THEN GOTO 2800 ELSE GOTO 2810
2810 IF B$="Y" THEN GOTO 2840 ELSE GOTO 2820
2820 IF B$="N" THEN GOTO 2840 ELSE GOTO 2830
2830 GOTO 2790
2840 RETURN
2850 REM   THIS IS THE BEGINNING OF SCREEN #2.....
2860 REM   THIS IS THE SCREEN BORDER SUBROUTINE.
2870 LOCATE 1,5
2880 PRINT " _____ SCREEN" K "_____
   "
2890 LOCATE 2,5
2900 PRINT "¦
 ¦"
2910 LOCATE 4,5
2920 PRINT "¦_____
_¦"
2930 RETURN
2940 REM  THIS IS THE START OF SCREEN 2
2950 REM
2960 K = 2:HP=0:NOM=0
 970 CLS
2980 GOSUB 2860
2990 LOCATE 3,5
```

```
3000 PRINT "|                    PLEASE ANSWER THE FOLLOWING QUESTIONS
 |"
3010 LOCATE  8, 5
3020 PRINT "1. WILL YOU CONDUCT A PRICE ANALYSIS (Y/N)?"
3030  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3040 LOCATE 10, 5
3050 PRINT "2. WILL THIS BE A LEVEL I ANALYSIS (Y/N)?"
3060  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3070 LOCATE 12, 5
3080 PRINT "3. WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS ?"
3090 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3100 LOCATE 14, 5
3110 PRINT "4. HOW MANY SOURCE APPROVALS WILL BE REQUIRED ?"
3120 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3130 LOCATE 16, 5
3140 PRINT "5. HOW MANY PLANT VISITS FOR THIS SOURCE APP.? "
3150 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3160 LOCATE 18, 5
3170 PRINT "6. HOW MANY AF PERSONNEL WILL MAKE THESE VISITS?"
3180 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3190 LOCATE 20, 5
3200 PRINT "7. WHAT IS THE AVERAGE GRADE OF THESE VISITORS?"
3210 LOCATE 20,70:COLOR 0,7:PRINT."      ":COLOR 7,0
3220 LOCATE 22, 5
3230 PRINT "8. IS THIS A SOLE SOURCE PROCUREMENT? (Y/N)"
3240 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
3250 GOSUB 2660
3260 IF NOLD$ = "N" THEN GOTO 3270 ELSE GOTO 3280
3270 GOSUB 1020
3280 GOSUB 1200
3290 GOSUB 1300
3300 GOSUB 2150
3310 GOSUB 2220
3320 GOSUB 2300
3330 GOSUB 2380
3340 GOSUB 2460
3350 GOSUB 1890
3360 GOSUB 2760
3370 IF B$="N" GOTO 2940
3380 PRINT #1,A1$(K)
3390 PRINT #1,A2$(K)
3400 PRINT #1,A3$(K)
3410 PRINT #1,A4$(K)
3420 PRINT #1,A5$(K)
3430 PRINT #1,A6$(K)
3440 PRINT #1,A7$(K)
3450 PRINT #1,A8$(K)
3460 GOTO 3470
3470 REM  THIS IS THE START OF SCREEN 3
3480 REM
3490 REM
```

```
00 K = 3:HP=0:NOM=0
10 CLS
20 GOSUB 2860
30 LOCATE 3,5
40 PRINT "!                    PLEASE ANSWER THE FOLLOWING QUESTIONS
"
50 LOCATE  8, 5
60 PRINT "1. WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N)"
70  LOCATE  8,70:COLOR 0,7:PRINT "     ":COLOR 7,0
80 LOCATE 10, 5
90 PRINT "2. WILL IT BE A LEVEL I EFFORT? (Y/N)"
00  LOCATE 10,70:COLOR 0,7:PRINT "     ":COLOR 7,0
10 LOCATE 12, 5
20 PRINT "3. THE AVERAGE GRADE OF THESE ENGINEERS WILL BE ..."
30 LOCATE 12,70:COLOR 0,7:PRINT "     ":COLOR 7,0
40 LOCATE 14, 5
50 PRINT "4. WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N)"
60 LOCATE 14,70:COLOR 0,7:PRINT "     ":COLOR 7,0
70 LOCATE 16, 5
30 PRINT "5. WILL THIS SURVEY REQUIRE ON-SITE VISITS? (Y/N)"
90 LOCATE 16,70:COLOR 0,7:PRINT "     ":COLOR 7,0
00 LOCATE 18, 5
10 PRINT "6. HOW MANY VISITS WILL BE REQUIRED?"
20 LOCATE 18,70:COLOR 0,7:PRINT "     ":COLOR 7,0
30 LOCATE 20, 5
40 PRINT "7. HOW MANY PERSONNEL ON THE AF VISIT TEAM?"
50 LOCATE 20,70:COLOR 0,7:PRINT "     ":COLOR 7,0
60 LOCATE 22, 5
70 PRINT "8. WHAT IS THE AVERAGE GS GRADE OF THIS TEAM?"
30 LOCATE 22,70:COLOR 0,7:PRINT "     ":COLOR 7,0                    I?"
90 GOSUB 2660
00 IF NOLD$ = "N" THEN GOTO 3810 ELSE GOTO 3820
10 GOSUB 1020
20 GOSUB 1200
30 GOSUB 1300
40 GOSUB 2150
50 GOSUB 1500
60 GOSUB 1600
70 GOSUB 2380
80 GOSUB 2460
90 GOSUB 2540
00 GOSUB 2760
 0 IF B$="N" GOTO 3470
20 PRINT #1,A1$(K)
30 PRINT #1,A2$(K)
40 PRINT #1,A3$(K)
50 PRINT #1,A4$(K)
60 PRINT #1,A5$(K)
70 PRINT #1,A6$(K)
80 PRINT #1,A7$(K)
90 PRINT #1,A8$(K)
```

```
4500 PRINT #1,A5$(K)
4510 PRINT #1,A6$(K)
4520 PRINT #1,A7$(K)
4530 PRINT #1,A8$(K)
4540 GOTO 4550
4550 REM THIS IS THE START OF SCREEN 5
4560 REM
4570 K = 5:HP=0:NOM=0
4580 CLS
4590 GOSUB 2860
4600 LOCATE 3,5
4610 PRINT "|                    PLEASE ANSWER THE FOLLOWING QUESTIONS
  |"
4620 LOCATE  8, 5
4630 PRINT "1. WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)"
4640  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4650 LOCATE 10, 5
4660 PRINT "2. WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N)"
4670  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4680 LOCATE 12, 5
4690 PRINT "3. WHAT WILL WARRANTEES COST? "
4700 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4710 LOCATE 14, 5
4720 PRINT "4. WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF ?"
4730 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4740 LOCATE 16, 5
4750 PRINT "5. HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME? (MILES)"
4760 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4770 LOCATE 18, 5
4780 PRINT "6. HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?"
4790 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4800 LOCATE 20, 5
4810 PRINT "7. WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?"
4820 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4830 LOCATE 22, 5
4840 PRINT "8. WHAT IS THE COST OF FACILITY MODIFICATIONS?"
4850 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
4860 GOSUB 2660
4870 IF NOLD$ = "N" THEN GOTO 4880 ELSE GOTO 4890
4880 GOSUB 1020
4890 GOSUB 1200
4900 GOSUB 1300
4910 GOSUB 2150
4920 GOSUB 2220
4930 GOSUB 2300
4940 GOSUB 2380
4950 GOSUB 2460
4960 GOSUB 2540
4970 GOSUB 2760
  30 IF B$="N" GOTO 4550
4990 PRINT #1,A1$(K)
```

```
 )00 PRINT #1,A2$(K)
5010 PRINT #1,A3$(K)
5020 PRINT #1,A4$(K)
5030 PRINT #1,A5$(K)
5040 PRINT #1,A6$(K)
5050 PRINT #1,A7$(K)
5060 PRINT #1,A8$(K)
5070 GOTO 5080
5080 REM  THIS IS THE START OF SCREEN 6
5090 REM
5100 REM
5110 K = 6:HP=0:NOM=0
5120 CLS
5130 GOSUB 2860
5140 LOCATE 3,5
5150 PRINT "!                    PLEASE ANSWER THE FOLLOWING QUESTIONS
 !"
5160 LOCATE  8, 5
5170 PRINT "1. WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?"
5180  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5190 LOCATE 10, 5
5200 PRINT "2. HOW MANY SOURCES WILL BE DEVELOPED?"
5210  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5220 LOCATE 12, 5
5230 PRINT "3. HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?"
 240 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5250 LOCATE 14, 5
5260 PRINT "4. HOW MANY AF VISITORS ON EACH TRIP?"
5270 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5280 LOCATE 16, 5
5290 PRINT "5. WHAT WILL BE THEIR AVERAGE GRADE?"
5300 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5310 LOCATE 18, 5
5320 PRINT "6. HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?"
5330 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5340 LOCATE 20, 5
5350 PRINT "7. WHAT IS THE HIGHEST CLASSIFICATION OF CBO ITEMS?"
5360 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5370 LOCATE 22, 5
5380 PRINT "8. THE NO. OF NEW CONTRACTOR PERS. REQUIRING CLEARANCES IS..."
5390 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5400 GOSUB 2660
5410 IF NOLD$ = "N" THEN GOTO 5420 ELSE GOTO 5430
5420 GOSUB 1020
5430 GOSUB 1990
5440 GOSUB 2070
5450 GOSUB 2150
5460 GOSUB 2220
5470 GOSUB 2300
5480 GOSUB 2380
 490 GOSUB 2460
```

```
5500 GOSUB 2540
5510 GOSUB 2760
5520 IF B$="N" GOTO 5080
5530 PRINT #1,A1$(K)
5540 PRINT #1,A2$(K)
5550 PRINT #1,A3$(K)
5560 PRINT #1,A4$(K)
5570 PRINT #1,A5$(K)
5580 PRINT #1,A6$(K)
5590 PRINT #1,A7$(K)
5600 PRINT #1,A8$(K)
5610 GOTO 5620
5620 REM  THIS IS THE START OF SCREEN 7
5630 REM
5640 K = 7:HP=0:NOM=0
5650 CLS
5660 GOSUB 2860
5670 LOCATE 3,5
5680 PRINT "¦                    PLEASE ANSWER THE FOLLOWING QUESTIONS
 ¦"
5690 LOCATE  8, 5
5700 PRINT "1. HOW MANY PROPOSALS IN SOURCE SELECTION?"
5710  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5720 LOCATE 10, 5
5730 PRINT "2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?"
5740  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5750 LOCATE 12, 5
5760 PRINT "3. WHAT IS THEIR AVERAGE GRADE?"
5770 LOCATE 12,70:COLOR 0,7:PRINT "      "
5780 LOCATE 14, 5
5790 PRINT "4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS...."
5800 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5810 LOCATE 16, 5
5820 PRINT "5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS..."
5830 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5840 LOCATE 18, 5
5850 PRINT "6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS..."
5860 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5870 LOCATE 20, 5
5880 PRINT "7. HOW MANY SOLICITATIONS WILL BE SENT OUT?    "
5890 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5900 LOCATE 22, 5
5910 PRINT "8. WHAT IS THE AVERAGE NUMBER OF SPO PERSONNEL?"
5920 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
5930 GOSUB 2660
5940 IF NOLD$ = "N" THEN GOTO 5950 ELSE GOTO 5960
5950 GOSUB 1020
5960 GOSUB 1990
5970 GOSUB 2070
5980 GOSUB 2150
5990 GOSUB 2220
```

```
 000 GOSUB 2300
5010 GOSUB 2380
6020 GOSUB 2460
6030 GOSUB 2540
6040 GOSUB 2760
6050 IF B$="N" GOTO 5620
6060 PRINT #1,A1$(K)
6070 PRINT #1,A2$(K)
6080 PRINT #1,A3$(K)
6090 PRINT #1,A4$(K)
6100 PRINT #1,A5$(K)
6110 PRINT #1,A6$(K)
6120 PRINT #1,A7$(K)
6130 PRINT #1,A8$(K)
6140 GOTO 7190
6150 REM  THIS IS THE START OF SCREEN 8
6160 REM
6170 K = 8:HP=0:NOM=0
6180 CLS
6190 GOSUB 2860
6200 LOCATE 3,5
6210 PRINT "|                    PLEASE ANSWER THE FOLLOWING QUESTIONS
 |"
6220 LOCATE  8, 5
6230 PRINT "1. 88888888888888ALS IN SOURCE SELECTION?"
 240  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6250 LOCATE 10, 5
6260 PRINT "2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?"
6270  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6280 LOCATE 12, 5
6290 PRINT "3. WHAT IS THEIR AVERAGE GRADE?"
6300 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6310 LOCATE 14, 5
6320 PRINT "4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS...."
6330 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6340 LOCATE 16, 5
6350 PRINT "5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS..."
6360 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6370 LOCATE 18, 5
6380 PRINT "6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS..."
6390 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6400 LOCATE 20, 5
6410 PRINT "7. A GOOD ONE.................                    "
6420 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6430 LOCATE 22, 5
6440 PRINT "8. ANOTHER GOOD ONE.............                  "
6450 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6460 GOSUB 2660
6470 IF NOLD$ = "N" THEN GOTO 6480 ELSE GOTO 6490
6480 GOSUB 1020
 490 GOSUB 1990
```

```
6500 GOSUB 2070
 510 GOSUB 2150
6520 GOSUB 2220
6530 GOSUB 2300
6540 GOSUB 2380
6550 GOSUB 2460
6560 GOSUB 2540
6570 GOSUB 2760
6580 IF B$="N" GOTO 6150
6590 PRINT #1,A1$(K)
6600 PRINT #1,A2$(K)
6610 PRINT #1,A3$(K)
6620 PRINT #1,A4$(K)
6630 PRINT #1,A5$(K)
6640 PRINT #1,A6$(K)
6650 PRINT #1,A7$(K)
6660 PRINT #1,A8$(K)
6670 REM  THIS IS THE START OF SCREEN 9
6680 REM
6690 K = 9:HP=0:NOM=0
6700 CLS
6710 GOSUB 2860
6720 LOCATE 3,5
6730 PRINT "¦                    PLEASE ANSWER THE FOLLOWING QUESTIONS
 ¦"
6740 LOCATE  8, 5
 750 PRINT "1. 99999999999999SALS IN SOURCE SELECTION?"
6760  LOCATE  8,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6770 LOCATE 10, 5
6780 PRINT "2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?"
6790  LOCATE 10,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6800 LOCATE 12, 5
6810 PRINT "3. WHAT IS THEIR AVERAGE GRADE?"
6820 LOCATE 12,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6830 LOCATE 14, 5
6840 PRINT "4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS...."
6850 LOCATE 14,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6860 LOCATE 16, 5
6870 PRINT "5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS..."
6880 LOCATE 16,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6890 LOCATE 18, 5
6900 PRINT "6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS..."
6910 LOCATE 18,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6920 LOCATE 20, 5
6930 PRINT "7. A GOOD ONE.\.....                    "
6940 LOCATE 20,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6950 LOCATE 22, 5
6960 PRINT "8. ANOTHER GOOD ONE.....                "
6970 LOCATE 22,70:COLOR 0,7:PRINT "      ":COLOR 7,0
6980 GOSUB 2660
6990 IF NOLD$ = "N" THEN GOTO 7000 ELSE GOTO 7010
```

```
7000 GOSUB 1020
7010 GOSUB 1990
7020 GOSUB 2070
7030 GOSUB 2150
7040 GOSUB 2220
7050 GOSUB 2300
7060 GOSUB 2380
7070 GOSUB 2460
7080 GOSUB 2540
7090 GOSUB 2760
7100 IF B$="N" GOTO 6670
7110 PRINT #1,A1$(K)
7120 PRINT #1,A2$(K)
7130 PRINT #1,A3$(K)
7140 PRINT #1,A4$(K)
7150 PRINT #1,A5$(K)
7160 PRINT #1,A6$(K)
7170 PRINT #1,A7$(K)
7180 PRINT #1,A8$(K)
7190 CLOSE #1
7200 REM  THIS IS THE MODEL DATA INPUT CHECK SECTION
7210 CLS
7220 REM
7230 LOCATE 10,10
7240 PRINT "*************************************************************************"
7250 LOCATE 11,10
7260 PRINT "*                                                                       *"
7270 LOCATE 12,10
7280 PRINT "*            DO YOU WISH TO VIEW THE DATA INPUT? (Y/N)                  *"
7290 LOCATE 13,10
7300 PRINT "*                                                                       *"
7310 LOCATE 14,10
7320 PRINT "*************************************************************************"
7330 LOCATE 17,20
7340 PRINT "NOTE:::: Y MEANS YES"
7350 LOCATE 19,20
7360 PRINT "          N MEANS NO"
7370 LOCATE 12,68:PRINT "> "
7380 E$=INKEY$:IF E$="" THEN GOTO 7380 ELSE GOTO 7390
7390 IF E$="Y" THEN GOTO 7420 ELSE GOTO 7400
7400 IF E$="N" THEN GOTO 7450 ELSE GOTO 7410
7410 GOTO 7370
7420 CLS:LOCATE 15,25
7430 PRINT "THE INPUT DATA MODEL IS LOADING"
7440 RUN  "DATINY"
7450 CLS:LOCATE 15,25
7460 PRINT "THE CALCULATION MODEL IS LOADING"
7470 RUN  "CALCUY"
7480 REM THIS IS THE HELP SECTION.............
7490 REM
```

```
7500 CLS
7510 NOM = (K - 1)*8 + HP
7520 IF K=1 GOTO 7590
7530 IF K=2 GOTO 7600
7540 IF K=3 GOTO 7610
7550 IF K=4 GOTO 7620
7560 IF K=5 GOTO 7630
7570 IF K=6 GOTO 7640
7580 IF K=7 GOTO 7650
7590 ON HP GOTO 7700,7800,7940,8010,8090,8170,8270,8350
7600 ON HP GOTO 8450,8560,8690,8770,8860,8910,8970,9050
7610 ON HP GOTO 9100,9210,9340,9410,9530,9580,9630,9680
7620 ON HP GOTO 9760,9830,9890,9950,10030,10090,10170,10230
7630 ON HP GOTO 10310,10390,10470,10570,10650,10730,10810,10900
7640 ON HP GOTO 10980,11070,11180,11230,11290,11360,11420,11510
7650 ON HP GOTO 11590,11650,11710,11770,11850,11930,12000,12110
7660 LOCATE 24,20:PRINT "PRESS ANY KEY TO CONTINUE."
7670 A$=INKEY$: IF A$="" THEN 7670 ELSE GOTO 7680
7680 RETURN
7690 REM
7700 REM        THIS IS THE HELP FOR QUESTION 1 ON SCREEN 1
7710 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 1"
7720 LOCATE 4,5:PRINT "HOW MANY AF PERSONNEL CONDUCTED SCREENING?"
7730 LOCATE 7,10:PRINT "THIS IS THE NUMBER OF GOVERNMENT PERSONNEL THAT "
7740 LOCATE 9,10:PRINT "PARTICIPATED IN THE SCREENING OF THE POTENTIAL "
7750 LOCATE 11,10:PRINT "ITEMS FOR COMPONENT BREAKOUT.  NORMALLY THIS GROUP "
7760 LOCATE 13,10:PRINT "WOULD INCLUDE ENGINEERS, PROGRAM MANAGERS, CONTRACTING'

7770 LOCATE 15,10:PRINT "PERSONNEL, AND OTHERS FROM THE SPO CADRE."
7780 GOSUB 2620:CLS:GOTO 430
7790 CLS:GOTO 7970
7800 REM        THIS IS THE HELP FOR QUESTION 2 ON SCREEN 1
7810 CLS
7820 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 1"
7830 LOCATE 4,5:PRINT "WHAT IS THEIR AVERAGE GRADE?"
7840 LOCATE 7,10:PRINT "TO DETERMINE THIS FIGURE CALCULATE THE AVERAGE SCREENINC
"
7850 LOCATE 9,10:PRINT "TEAM GRADE BY ADDING THE GRADES OF THE PARTICIPANTS"
7860 LOCATE 11,10:PRINT "AND DIVIDE BY THE NUMBER OF PARTICIPANTS AND THEN"
7870 LOCATE 13,10:PRINT "SELECT THE NEAREST WHOLE NUMBER.  THE PROGRAM"
7880 LOCATE 15,10:PRINT "WILL ACCEPT ANY WHOLE NUMBER FROM 7 TO 15. "
7890 LOCATE 17,15: PRINT "2LT = GS9      1LT = GS11      CAPT = GS12"
7900 LOCATE 19,15: PRINT "MAJ = GS13   LCOL = GS14       COL = GS15"
7910 LOCATE 21,10:PRINT "    >>>CAUTION<<<          ENTER ONLY NUMBERS FROM    "
7920 LOCATE 23,10:PRINT "                                        7 TO 15"
7930 GOSUB 2620:CLS:GOTO 430
7940 REM        THIS IS THE HELP FOR QUESTION 3 ON SCREEN 1
7950 CLS
7960 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 1"
7970 LOCATE 4,5:PRINT "HOW MANY WEEKS DID THE SCREENING REQUIRE?"
7980 LOCATE 7,10:PRINT "THIS IS THE TOTAL TIME IN WEEKS OF THE SCREENING "
7990 LOCATE 9,10:PRINT "FROM THE START TO THE FINISH."
```

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8000 GOSUB 2620:CLS:GOTO 430
8010 REM        THIS IS THE HELP FOR QUESTION 4 ON SCREEN 1
8020 CLS
8030 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 1"
8040 LOCATE 4,5:PRINT "SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?"
8050 LOCATE 7,10:PRINT "THIS IS AN ESTIMATE OF THE PERCENTAGE OF THE TIME"
8060 LOCATE 9,10:PRINT "DEVOTED TO SCREENING BY THE TEAM MEMBERS."
8070 LOCATE 11,10:PRINT "DATA ENTRY EXAMPLE.....FOR 30 PERCENT ENTER 30"
8080 GOSUB 2620:CLS:GOTO 430
8090 REM        THIS IS THE HELP FOR QUESTION 5 ON SCREEN 1
8100 CLS
8110 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 1"
8120 LOCATE 4,5:PRINT "WHAT WAS THE PRIME'S PRICE FOR THE CBO ITEMS?"
8130 LOCATE 7,10:PRINT "THIS IS THE TOTAL OF THE PRIME PRICES OF THE CBO"
8140 LOCATE 9,10:PRINT "ITEMS IDENTIFIED BY THE SCREENING TEAM. "
8150 LOCATE 11,10:PRINT "FOR EXAMPLE....ENTER 1000000 FOR ONE MILLION."
8160 GOSUB 2620:CLS:GOTO 430
8170 REM        THIS IS THE HELP FOR QUESTION 6 ON SCREEN 1
8180 CLS
8190 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 1"
8200 LOCATE 4,5:PRINT "WHAT IS THE NEW CONTRACTOR'S PRICE FOR THE ITEMS?"
8210 LOCATE 7,10:PRINT "THIS IS THE ANTICIPATED OR KNOWN PRICE OF THE CBO"
8220 LOCATE 9,10:PRINT "ITEMS IDENTIFIED FOR THE BREAKOUT.  INCLUDE ALL OF"
8230 LOCATE 11,10:PRINT "OF THE ITEMS IN THE QUANTITIES ORDERED."
8240 LOCATE 13,10:PRINT "THIS COST WILL BE COMPARED TO THE PRIME COST"
8250 LOCATE 15,10:PRINT "THAT WAS CALLED FOR ABOVE."
8260 GOSUB 2620:CLS:GOTO 430
8270 REM        THIS IS THE HELP FOR QUESTION 7 ON SCREEN 1
8280 CLS
8290 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 1"
8300 LOCATE 4,5:PRINT "WHAT IS THE INFLATION RATE?"
8310 LOCATE 7,10:PRINT "THIS IS THE RATE OF INFLATION SINCE JANUARY 1987."
8320 LOCATE 9,10:PRINT "EXAMPLE....IF THE INFLATION RATE IS 5 PERCENT THEN"
8330 LOCATE 11,10:PRINT ".........ENTER 5"
8340 GOSUB 2620:CLS:GOTO 430
8350 REM        THIS IS THE HELP FOR QUESTION 8 ON SCREEN 1
8360 CLS
8370 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 1"
8380 LOCATE 4,5:PRINT "WHAT IS THE FRINGE BENEFIT RATE?"
8390 LOCATE 7,10:PRINT "THIS IS THE RATE ADDED TO SALARY INFORMATION IN "
8400 LOCATE 9,10:PRINT "ORDER TO COMPUTE TOTAL COSTS OF PERSONNEL.  THE ASD RATE

8410 LOCATE 11,10:PRINT "IS CURRENTLY AT 27.3 PERCENT.  UNLESS YOU HAVE NEWER"
8420 LOCATE 13,10:PRINT "INFORMATION THEN WE RECOMMEND THAT YOU ENTER 27.3  "
8430 LOCATE 15,10:PRINT "AS THE FRINGE BENEFIT RATE."
8440 GOSUB 2620:CLS:GOTO 430
8450 REM
8460 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 2"
8470 LOCATE 4,5:PRINT "WILL YOU CONDUCT A PRICE ANALYSIS? (Y/N)"
8480 LOCATE 7,10:PRINT "A PRICE ANALYSIS IS USED TO DEVELOP VALIDATED PRICES"
8490 LOCATE 9,10:PRINT "FOR ITEMS WHICH WILL BE PURCHASED IN A SOLE SOURCE"
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8500 LOCATE 11,10:PRINT "MODE.  THESE VALIDATED PRICES, OFTEN REFERRED TO AS "
8510 LOCATE 13,10:PRINT "VALUE BASED PRICES, ARE ATTEMPTS TO DEFINE WHAT THE"
8520 LOCATE 15,10:PRINT "ITEM 'SHOULD COST' IF IT WERE ACQUIRED UNDER COMPETI-"
8530 LOCATE 17,10:PRINT "TIVE CONDITIONS.  REVIEWS MAY BE ACCOMPLISHED AS "
8540 LOCATE 19,10:PRINT "EITHER LEVEL I OR LEVEL II REVIEW."
8550 GOSUB 2620:CLS:GOTO 2980
8560 REM       THIS IS THE HELP FOR QUESTION 2 ON SCREEN 2
8570 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 2"
8580 LOCATE 4,5:PRINT "WILL THIS BE A LEVEL I ANALYSIS? (Y/N)"
8590 LOCATE 7,10:PRINT "A LEVEL I ANALYSIS IS MORE OF A LIMITED REVIEW IN WHICH'

8600 LOCATE 9,10:PRINT "THE LAST PRICE PAID IS REVIEWED AGAINST THE EXISTING"
8610 LOCATE 11,10:PRINT "DOCUMENTATION TO DETERMINE IF THAT PRICE IS OUT OF"
8620 LOCATE 13,10:PRINT "LINE WITH THE VALUE OF THE ITEM.  THESE LEVEL I "
8630 LOCATE 15,10:PRINT "REVIEWS ARE ACCOMPLISHED RELATIVELY QUICKLY.
8640 LOCATE 17,10:PRINT "A LEVEL II ANALYSIS IS MUCH MORE EXTENSIVE AND IN-"
8650 LOCATE 19,10:PRINT "CLUDES MATERIAL, PROCESS, AND LABOR ESTIMATES."
8660 LOCATE 21,10:PRINT "LEVEL I ANALYSIS USUALLY REQUIRES ABOUT 1 HOUR OF"
8670 LOCATE 23,10:PRINT "EFFORT AND A LEVEL II ABOUT 12.5 HOURS."
8680 GOSUB 2620:CLS:GOTO 2980
8690 REM       THIS IS THE HELP FOR QUESTION 3 ON SCREEN 2
8700 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 2"
8710 LOCATE 4,5:PRINT "WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS?"
8720 LOCATE 7,10:PRINT "ADD THE GRADES OF THE ANALYSTS AND DIVIDE BY THE "
8730 LOCATE 9,10:PRINT "NUMBER OF ANALYSTS AND THEN SELECT THE NEAREST  "
8740 LOCATE 11,10:PRINT "WHOLE NUMBER.  THE MODEL ACCEPTS NUMBERS FROM 7 "
8750 LOCATE 13,10:PRINT "TO 15. "
8760 GOSUB 2620:CLS:GOTO 2980
8770 REM       THIS IS THE HELP FOR QUESTION 4 ON SCREEN 2
8780 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 2"
8790 LOCATE 4,5:PRINT "HOW MANY SOURCE APPROVALS WILL BE REQUIRED?"
8800 LOCATE 7,10:PRINT "THIS IS THE REVIEW OF POTENTIAL SOURCES BY REVIEWING"
8810 LOCATE 9,10:PRINT "THE DOCUMENTATION SUBMITTED BY THE POTENTIAL SOURCE"
8820 LOCATE 11,10:PRINT "INDEPENDENT OF ANY SPECIFIC REQUEST BY THE AIR FORCE."
8830 LOCATE 15,10:PRINT "THIS SOURCE APPROVAL USUALLY REQUIRES ABOUT 20 HOURS"
8840 LOCATE 17,10:PRINT "OF EFFORT BY THE GOVERNMENT."
8850 GOSUB 2620:CLS:GOTO 2980
8860 REM       THIS IS THE HELP FOR QUESTION 5 ON SCREEN 2
8870 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 2"
8880 LOCATE 4,5:PRINT "HOW MANY PLANT VISITS FOR THIS SOURCE APP.?"
8890 LOCATE 7,10:PRINT "ENTER THE NUMBER OF PLANNED VISITS."
8900 GOSUB 2620:CLS:GOTO 2980
8910 REM       THIS IS THE HELP FOR QUESTION 6 ON SCREEN 2
8920 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 2"
8930 LOCATE 4,5:PRINT "HOW MANY AF PERS WILL MAKE THESE VISITS?"
8940 LOCATE 7,10:PRINT "ENTER THE AVERAGE NUMBER OF TRAVELERS OF EACH"
8950 LOCATE 9,10:PRINT "OF THE SOURCE APPROVAL VISITS.                "
8960 GOSUB 2620:CLS:GOTO 2980
8970 REM       THIS IS THE HELP FOR QUESTION 7 ON SCREEN 2
8980 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 2"
8990 LOCATE 4,5:PRINT "WHAT IS THE AVERAGE GRADE OF THESE VISITORS?"
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9000 LOCATE 7,10:PRINT "ADD THE GRADES OF THE VISITORS AND DIVIDE BY"
9010 LOCATE 9,10:PRINT "BY THE NUMBERS OF PERSONNEL AND THEN SELECT"
9020 LOCATE 11,10:PRINT "THE NEAREST WHOLE NUMBER. "
9030 LOCATE 13,10:PRINT "THE MODEL WILL ACCEPT 7 TO 15 AS ENTRIES."
9040 GOSUB 2620:CLS:GOTO 2980
9050 REM       THIS IS THE HELP FOR QUESTION 8 ON SCREEN 2
9060 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 2"
9070 LOCATE 4,5:PRINT "WILL THIS BE A SOLE SOURCE PROCUREMENT? (Y/N)"
9080 LOCATE 7,10:PRINT "SELF EXPLAINATORY....SELECT Y OR N "
9090 GOSUB 2620:CLS:GOTO 2980
9100 REM       THIS IS THE HELP FOR QUESTION 1 ON SCREEN 3
9110 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 3"
9120 LOCATE 4,5:PRINT "WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N)"
9130 LOCATE 7,10:PRINT "REVERSE ENGINEERING (RE) CAN RANGE FROM SIMPLE"
9140 LOCATE 9,10:PRINT "SUBSTITUTION OF GOVERNMENT/INDUSTRY SPECIFICATIONS"
9150 LOCATE 11,10:PRINT "WHEN CONTRACTOR SPECIFICATIONS ARE MISSING OR THE "
9160 LOCATE 13,10:PRINT "GOVERNMENT LACKS RIGHTS IN DATA FOR THE CONTRACTOR "
9170 LOCATE 15,10:PRINT "SPECIFICATIONS TO DEVELOPMENT OF A MAJOR PROTION   "
9180 LOCATE 17,10:PRINT "OF THE ENGINEERING DOCUMENTATION NEEDED TO PRODUCE "
9190 LOCATE 19,10:PRINT "THE ITEM. TWO LEVELS OF RE ON EFFORT ARE AVAILABLE."
9200 GOSUB 2620:CLS:GOTO 3520
9210 REM       THIS IS THE HELP FOR QUESTION 2 ON SCREEN 3
9220 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 3"
9230 LOCATE 4,5:PRINT "WILL IT BE A LEVEL I EFFORT ? (Y/N)"
9240 LOCATE 7,10:PRINT "NORMALLY LEVEL I CAN BE ACCOMPLISHED BY REVIEW"
9250 LOCATE 9,10:PRINT "OF AVAILABLE DATA AND USE OF GENERAL ENGINEERING"
9260 LOCATE 11,10:PRINT "KNOWLEDGE.  PHYSICAL MEASURING AND ANALYSIS OF THE"
9270 LOCATE 13,10:PRINT "PART IS NOT NECESSARY.
9280 LOCATE 15,10:PRINT "LEVEL II ANALYSIS IS MORE EXTENSIVE THAN LEVEL I AND"
9290 LOCATE 17,10:PRINT "INCLUDES MEASURING AND ANALYSIS OF THE PART."
9300 LOCATE 19,10:PRINT "LEVEL I EFFORT IS MEASURED AS 0.1 HOURS TIMES THE"
9310 LOCATE 21,10:PRINT "NUMBER OF CHASS I DRAWINGS.  THE LEVEL II MULTI-"
9320 LOCATE 23,10:PRINT "PLIER IS 4.0 HOURS PER CLASS I DRAWING."
9330 GOSUB 2620:CLS:GOTO 430
9340 REM       THIS IS THE HELP FOR QUESTION 3 ON SCREEN 3
9350 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 3"
9360 LOCATE 4,5:PRINT "THE AVERAGE GRADE OF THESE ENGINEERS WILL BE..."
9370 LOCATE 7,10:PRINT "COMPUTE AS WITH OTHER AVERAGE GRADE USING THE GRADES"
9380 LOCATE 9,10:PRINT "OF THE ENGINEERS INVOLVED. REMEMBER THE MODEL WILL"
9390 LOCATE 11,10:PRINT "ACCEPT ONLY WHOLE NUMBERS FROM 7 TO 15."
9400 GOSUB 2620:CLS:GOTO 3520
9410 REM       THIS IS THE HELP FOR QUESTION 4 ON SCREEN 3
9420 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 3"
9430 LOCATE 4,5:PRINT "WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N)"
9440 LOCATE 7,10:PRINT "WHEN A NEW SOURCE IS BEING CONSIDERED FOR AWARD, IT"
9450 LOCATE 9,10:PRINT "IS NECESSARY THAT THE GOVERNMENT MAKE AN ASSESSMENT"
9460 LOCATE 11,10:PRINT "OF THE RESPONSIBILITY AND RESPONSIVENESS OF THE"
9470 LOCATE 13,10:PRINT "OFFEROR. THE SURVEY MAY REQUIRE A VISIT TO THE "
9480 LOCATE 15,10:PRINT "OFFEROR'S FACILITY. RECENT ESTIMATES INDICATE THAT"
9490 LOCATE 17,10:PRINT "1/3 OF NEW OFFERORS WILL REQUIRE A PAS AND THAT 40"
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9[illegible]0 LOCATE 19,10:PRINT "PERCENT OF THESE WILL REQUIRE AN ON SITE VISIT."
9[illegible].0 LOCATE 21,10:PRINT "PAS WILL REQUIRE 5 HOURS PLUS 6 WHEN ON SITE REQUIRED."

9520 GOSUB 2620:CLS:GOTO 3520
9530 REM        THIS IS THE HELP FOR QUESTION 5 ON SCREEN 3
9540 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 3"
9550 LOCATE 4,5:PRINT "WILL THIS SURVEY REQUIRE ON SITE VISITS? (Y/N)"
9560 LOCATE 7,10:PRINT "SELF EXPLAINATORY....SELECT Y OR N "
9570 GOSUB 2620:CLS:GOTO 3520
9580 REM        THIS IS THE HELP FOR QUESTION 6 ON SCREEN 3
9590 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 3"
9600 LOCATE 4,5:PRINT "HOW MANY VISITS WILL BE REQUIRED?"
9610 LOCATE 7,10:PRINT "SELF EXPLAINATORY....ENTER NUMBER."
9620 GOSUB 2620:CLS:GOTO 3520
9630 REM        THIS IS THE HELP FOR QUESTION 7 ON SCREEN 3
9640 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 3"
9650 LOCATE 4,5:PRINT "HOW MANY PERSONNEL ON THE AE VISIT TEAM?"
9660 LOCA[illegible]
9670 GOSUB 2620:CLS:GOTO 3520
9680 REM        THIS IS THE HELP FOR QUESTION 8 ON SCREEN 3
9690 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 3"
9700 LOCATE 4,5:PRINT "WHAT IS THE AVE. GS GRADE OF THIS TEAM?"
9710 LOCATE 7,10:PRINT "ADD THE GRADES OF THE TEAM MEMBERS AND DIVIDE BY THE "
9720 LOCATE 9,10:PRINT "NUMBER OF TEAM MEMBERS AND THEN SELECT THE NEAREST  "
9730 LOCATE 11,10:PRINT "WHOLE NUMBER.  THE MODEL ACCEPTS WHOLE NUMBERS  "
9[illegible]0 LOCATE 13,10:PRINT "FROM 7 TO 15. "
9[illegible]0 GOSUB 2620:CLS:GOTO 3520
9760 REM        THIS IS THE HELP FOR QUESTION 1 ON SCREEN 4
9770 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 4"
9780 LOCATE 4,5:PRINT "IS THIS ANALYSIS FOR MORE THAN ONE ITEM? (Y/N)"
9790 LOCATE 7,10:PRINT "SELF EXPLANATORY
9800 LOCATE 9,10:PRINT "      ANSWER WITH Y FOR YES
9810 LOCATE 11,10:PRINT "                    N FOR NO
9820 GOSUB 2620:CLS:GOTO 4060
9830 REM        THIS IS THE HELP FOR QUESTION 2 ON SCREEN 4
9840 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 4"
9850 LOCATE 4,5:PRINT " HOW MANY CLASS 1 (8.5 BY 11) DRAWINGS?"
9860 LOCATE 7,10:PRINT "COUNT THE TOTAL NUMBER OF THESE CLASS 1, 8.5 INCHES"
9870 LOCATE 9,10:PRINT "BY 11 INCHES, DRAWINGS FOR ALL OF THE CBO ITEM(S)."
9880 GOSUB 2620:CLS:GOTO 4060
9890 REM        THIS IS THE HELP FOR QUESTION 3 ON SCREEN 4
9900 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 4"
9910 LOCATE 4,5:PRINT "WHAT IS THE WEIGHT OF THE ITEM(S)?"
9920 LOCATE 7,10:PRINT "ENTER THE TOTAL ITEM(S) WEIGHT IN POUNDS."
9930 LOCATE 9,10:PRINT "    IF 57 POUNDS....ENTER 57"
9940 GOSUB 2620:CLS:GOTO 4060
9950 REM        THIS IS THE HELP FOR QUESTION 4 ON SCREEN 4
9960 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 4"
9970 LOCATE 4,5:PRINT "WHAT IS THE TOTAL SPO BUDGET?"
9980 LOCATE 7,10:PRINT "ENTER THE TOTAL BUDGET FOR THE CURRENT LIFE OF THE SPO."

[illegible]0 LOCATE 9,10:PRINT "OF THE SPO."
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 00 LOCATE 11,10:PRINT "EXAMPLE....IF THE TOTAL BUDGET IS 600 MILLION DOLLARS'

)010 LOCATE 13,10:PRINT ".......THEN ENTER 600000000"
)020 GOSUB 2620:CLS:GOTO 4060
)030 REM        THIS IS THE HELP FOR QUESTION 5 ON SCREEN 4
)040 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 4"
)050 LOCATE 4,5:PRINT "HOW MANY MONTHS ARE AVAILABLE TO SPEND THIS BUDGET?"
)060 LOCATE 7,10:PRINT "ENTER THE TOTAL MONTHS ALLOCATED TO SPEND THE "
)070 LOCATE 9,10:PRINT "BUDGET IDENTIFIED IN THE QUESTION ABOVE."
)080 GOSUB 2620:CLS:GOTO 4060
)090 REM        THIS IS THE HELP FOR QUESTION 6 ON SCREEN 4
)100 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 4"
)110 LOCATE 4,5:PRINT "WILL THERE BE A FIRST ARTICLE QUALIFICATION? (Y/N)"
)120 LOCATE 7,10:PRINT "FIRST ARTICLES ARE USED AS A VEHICLE BY WHICH A "
)130 LOCATE 9,10:PRINT "CONTRACTOR DEMONSTRATES THE CAPABILITY TO MANU-"
)140 LOCATE 11,10:PRINT "FACTURE A SPECIFIC ITEM OR ITEMS.  TYPICALLY "
)150 LOCATE 13,10:PRINT "PRODUCTION WILL NOT START UNTIL THIS IS FINISHED."
)160 GOSUB 2620:CLS:GOTO 4060
 170 REM        THIS IS THE HELP FOR QUESTION 7 ON SCREEN 4
 180 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 4"
 190 LOCATE 4,5:PRINT "HOW MANY AF PERS WILL BE INVOLVED IN THIS QUAL?"
 200 LOCATE 7,10:PRINT "ENTER THE TOTAL NUMBER OF AIR FORCE PERSONNEL THAT"
 210 LOCATE 9,10:PRINT "WILL BE INVOLVED IN THE FIRST ARTICLE QUALIFICATION."
 220 GOSUB 2620:CLS:GOTO 4060
 230 REM        THIS IS THE HELP FOR QUESTION 8 ON SCREEN 4
  40 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 4"
 250 LOCATE 4,5:PRINT "WHAT WILL BE THE AVE. GS GRADE FOR THIS TEAM?"
 260 LOCATE 7,10:PRINT "AS IN PREVIOUS GRADE AVERAGES, DETERMINE THE AVERAGE"
 270 LOCATE 9,10:PRINT "TEAM MEMBER GRADE AND ENTER THE NEAREST WHOLE NUMBER."
 280 LOCATE 11,10:PRINT "
 290 LOCATE 13,10:PRINT "
 300 GOSUB 2620:CLS:GOTO 4060
 310 REM        THIS IS THE HELP FOR QUESTION 1 ON SCREEN 5
 320 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 5"
 330 LOCATE 4,5:PRINT "WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)"
 340 LOCATE 7,10:PRINT "EEO REFERS TO EQUAL OPPORTUNITY PROGRAMS.  TYPCALLY"
 350 LOCATE 9,10:PRINT "SMALL CONTRACTORS DO NOT HAVE ACTIVE EEO PROGRAMS"
 360 LOCATE 11,10:PRINT "AND THEREFORE IN ORDER TO COMPLY WITH CURRENT LAW"
 370 LOCATE 13,10:PRINT "WILL HAVE TO INITIATE THESE PROGRAMS."
 380 GOSUB 2620:CLS:GOTO 4590
 390 REM        THIS IS THE HELP FOR QUESTION 2 ON SCREEN 5
 400 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 5"
 410 LOCATE 4,5:PRINT "WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N)"
 420 LOCATE 7,10:PRINT "THESE INCLUDE SMALL BUSINESS, SMALL DISADVANTAGED"
 430 LOCATE 9,10:PRINT "BUSINESS, LABOR SURPLUS AREAS, OSHA, AND OTHER"
 440 LOCATE 11,10:PRINT "SOCIO-ECONOMIC PROGRAMS ESTABLISHED BY FAR"
 450 LOCATE 13,10:PRINT "SUBPART 19 PARAGRAPHS."
 460 GOSUB 2620:CLS:GOTO 4590
 470 REM        THIS IS THE HELP FOR QUESTION 3 ON SCREEN 5
 480 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 5"
  90 LOCATE 4,5:PRINT "WHAT WILL WARRANTEES COST?"
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10500 LOCATE 7,10:PRINT "IF THE NEW CONTRACT FOR THE CBO ITEM(S) REQUIRES"
10510 LOCATE 9,10:PRINT "WARRANTEES, THAN THESE COST SHOULD BE INCLUDED IN"
10520 LOCATE 11,10:PRINT "THE COST OF BREAKOUT.  IF THIS COST IS NOT INCLUDED"
10530 LOCATE 13,10:PRINT "IN THE NEW CBO CONTRACTOR COST ENTERED EARLIER THEN"
10540 LOCATE 15,10:PRINT "ENTER THIS WARRANTEE COST HERE.  IF THE WARRANTEE COST
"
10550 LOCATE 17,10:PRINT "IS INCLUDED PREVIOUSLY ENTER 0 HERE."
10560 GOSUB 2620:CLS:GOTO 4590
10570 REM       THIS IS THE HELP FOR QUESTION 4 ON SCREEN 5
10580 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 5"
10590 LOCATE 4,5:PRINT "WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF?"
10600 LOCATE 7,10:PRINT "THE PRIME'S CONTRACT WILL UNDOUBTEDLY CONTAIN A"
10610 LOCATE 9,10:PRINT "PROVISION FOR EARLY OR PARTIAL TERMINATION OF ALL"
10620 LOCATE 11,10:PRINT "OR PARTS OF THE CONTRACT DATA ITEMS."
10630 LOCATE 13,10:PRINT "      ENTER THIS COST."
10640 GOSUB 2620:CLS:GOTO 4590
10650 REM       THIS IS THE HELP FOR QUESTION 5 ON SCREEN 5
10660 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 5"
10670 LOCATE 4,5:PRINT "HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME?"
10680 LOCATE 7,10:PRINT "ENTER THE ONE WAY MILEAGE FROM THE NEW CONTRACTOR'S"
10690 LOCATE 9,10:PRINT "FACILITY (WHERE THE CBO WILL BE ASSEMBLED) TO THE "
10700 LOCATE 11,10:PRINT "PRIME'S FACILITY (WHERE THE FINAL END ITEM WILL BE"
10710 LOCATE 13,10:PRINT "ASSEMBLED.)
10720 GOSUB 2620:CLS:GOTO 4590
10730 REM       THIS IS THE HELP FOR QUESTION 6 ON SCREEN 5
10740 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 5"
10750 LOCATE 4,5:PRINT "HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?"
10760 LOCATE 7,10:PRINT "THIS IS THE NUMBER OF TECHNICAL REVIEWS ASSOCIATED"
10770 LOCATE 9,10:PRINT "WITH THE CBO ITEM(S).  THESE REVIEWS WOULD NOT BE "
10780 LOCATE 11,10:PRINT "HELD IF THE PRIMARY RESPONSIBILITY REMAINED WITH"
10790 LOCATE 13,10:PRINT "THE PRIME CONTRACTOR FOR THE CBO ITEM(S)."
10800 GOSUB 2620:CLS:GOTO 4590
10810 REM       THIS IS THE HELP FOR QUESTION 7 ON SCREEN 5
10820 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 5"
10830 LOCATE 4,5:PRINT "WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?"
10840 LOCATE 7,10:PRINT "ENTER THE COST TO THE GOVERNMENT OF ANY NEW EQUIP-"
10850 LOCATE 9,10:PRINT "MENT PURCHASED BY THE NEW CONTRACTOR THAT IS NOT"
10860 LOCATE 11,10:PRINT "INCLUDED IN THE PREVIOUSLY ENTERED CBO COST FROM"
10870 LOCATE 13,10:PRINT "THE NEW CONTRACTOR.  IF PREVIOUSLY INCLUDED THEN"
10880 LOCATE 15,10:PRINT "ENTER 0, OTHERWISE ENTER THE COST."
10890 GOSUB 2620:CLS:GOTO 4590
10900 REM       THIS IS THE HELP FOR QUESTION 8 ON SCREEN 5
10910 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 5"
10920 LOCATE 4,5:PRINT "WHAT IS THE COST OF FACILITY MODIFICATIONS?"
10930 LOCATE 7,10:PRINT "ENTER THE COST TO THE GOVERNMENT OF ANY FACILITY"
10940 LOCATE 9,10:PRINT "MODIFICATIONS AT THE NEW CONTRACTOR'S FACILITY"
10950 LOCATE 11,10:PRINT "THAT RESULTED FROM THE CBO ITEM(S)."
10960 LOCATE 13,10:PRINT "
10970 GOSUB 2620:CLS:GOTO 4590
10980 REM       THIS IS THE HELP FOR QUESTION 1 ON SCREEN 6
10990 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 6"
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11000 LOCATE 4,5:PRINT "WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?"
11010 LOCATE 7,10:PRINT "THIS IS THE GROUP OF AF CONTRACTING PERSONNEL"
11020 LOCATE 9,10:PRINT "THAT ARE RESPONSIBLE FOR THE CONTRACTING EFFORTS"
11030 LOCATE 11,10:PRINT "ASSOCIATED WITH THE CBO ITEM(S).  COMPUTE THE "
11040 LOCATE 13,10:PRINT "AVERAGE GRADE AS NOTED IN PREVIOUS QUESTIONS.
11050 LOCATE 15,10:PRINT "    DON'T FORGET....ONLY 7 TO 15 ARE ACCEPTABLE."
11060 GOSUB 2620:CLS:GOTO 5130
11070 REM       THIS IS THE HELP FOR QUESTION 2 ON SCREEN 6
11080 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 6"
11090 LOCATE 4,5:PRINT "HOW MANY SOURCES WILL BE DEVELOPED?"
11100 LOCATE 7,10:PRINT "SOURCE DEVELOPMENT USUALLY INCLUDES ACTIONS TAKEN"
11110 LOCATE 9,10:PRINT "BY THE AIR FORCE TO VALIDATE THE CAPABILITY OF A "
11120 LOCATE 11,10:PRINT "SECOND SOURCE FOR A NONCOMPETITIVE ITEM OR A "
11130 LOCATE 13,10:PRINT "SINGLE SOURCE FOR AN ITEM WHICH HAS NO KNOWN"
11140 LOCATE 15,10:PRINT "SOURCES."
11150 LOCATE 19,10:PRINT "SOURCE DEVELOPMENT AVERAGES 120 HOURS OF GOVERNMENT"
11160 LOCATE 21,10:PRINT "EFFORT."
11170 GOSUB 2620:CLS:GOTO 5130
11180 REM       THIS IS THE HELP FOR QUESTION 3 ON SCREEN 6
11190 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 6"
11200 LOCATE 4,5:PRINT "HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?
11210 LOCATE 7,10:PRINT "SELF-EXPLANATORY.  ENTER THE NUMBER."
11220 GOSUB 2620:CLS:GOTO 5130
11230 REM       THIS IS THE HELP FOR QUESTION 4 ON SCREEN 6
  240 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 6"
11250 LOCATE 4,5:PRINT "HOW MANY AF VISITORS ON EACH TRIP?"
11260 LOCATE 7,10:PRINT "THIS MAY VARY FROM TRIP TO TRIP SO USE AN AVERAGE."
11270 LOCATE 9,10:PRINT "INCLUDE BOTH MILITARY AND CIVILIAN AF PERSONNEL."
11280 GOSUB 2620:CLS:GOTO 5130
11290 REM       THIS IS THE HELP FOR QUESTION 5 ON SCREEN 6
11300 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 6"
11310 LOCATE 4,5:PRINT "WHAT WILL BE THEIR AVERAGE GRADE?"
11320 LOCATE 7,10:PRINT "THIS IS THE AVERAGE GRADE OF THE VISITORS IN THE "
11330 LOCATE 9,10:PRINT "PREVIOUS QUESTION.  THE MODEL WILL ACCEPT GRADES"
11340 LOCATE 11,10:PRINT "FROM 7 TO 15."
11350 GOSUB 2620:CLS:GOTO 5130
11360 REM       THIS IS THE HELP FOR QUESTION 6 ON SCREEN 6
11370 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 6"
11380 LOCATE 4,5:PRINT "HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?"
11390 LOCATE 7,10:PRINT "THIS IS THE TOTAL OF EMPLOYEES AT ALL OF THE "
11400 LOCATE 9,10:PRINT "FACILITIES ENGAGED IN THE CBO ITEM(S)."
11410 GOSUB 2620:CLS:GOTO 5130
11420 REM       THIS IS THE HELP FOR QUESTION 7 ON SCREEN 6
11430 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 6"
11440 LOCATE 4,5:PRINT "WHAT IS THE HIGHEST CLASSIFICATION OF THE CBO ITEM(S)?"
11450 LOCATE 7,10:PRINT "THE MODEL WILL ACCEPT UNCLAS FOR UNCLASSIFIED"
11460 LOCATE 9,10:PRINT "                          CONF   FOR CONFIDENTIAL"
11470 LOCATE 11,10:PRINT "                          SEC    FOR SECRET"
11480 LOCATE 13,10:PRINT "                          TSEC   FOR TOP SECRET"
  490 LOCATE 15,10:PRINT "        ENTER ONLY THESE VARIABLES."
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 500 GOSUB 2620:CLS:GOTO 5130
1510 REM        THIS IS THE HELP FOR QUESTION 8 ON SCREEN 6
11520 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 6"
11530 LOCATE 4,5:PRINT "THE NUMBER OF NEW CONTR PERS REQUIRING CLEARANCES IS...?
"
11540 LOCATE 7,10:PRINT "ENTER THE NUMBER OF PERSONNEL AT THE NEW CONTRACTOR'S"
11550 LOCATE 9,10:PRINT "FACILITY THAT WILL REQUIRE CLEARANCES THAT THEY "
11560 LOCATE 11,10:PRINT "DO NOT CURRENTLY POSSES."
11570 LOCATE 13,10:PRINT "
11580 GOSUB 2620:CLS:GOTO 5130
11590 REM        THIS IS THE HELP FOR QUESTION 1 ON SCREEN 7
11600 CLS:LOCATE 2,5:PRINT "QUESTION 1,SCREEN 7"
11610 LOCATE 4,5:PRINT "HOW MANY PROPOSALS IN SOURCE SELECTION?"
11620 LOCATE 7,10:PRINT "THIS IS THE KNOWN OR ANTICIPATED NUMBER OF PROPOSALS"
11630 LOCATE 9,10:PRINT "THAT WILL HAVE TO BE EVALUATED BY THE SPO TEAM."
11640 GOSUB 2620:CLS:GOTO 5660
11650 REM        THIS IS THE HELP FOR QUESTION 2 ON SCREEN 7
11660 CLS:LOCATE 2,5:PRINT "QUESTION 2,SCREEN 7"
11670 LOCATE 4,5:PRINT "HOW MAY AF PEOPLE IN THE SOURCE SELECTION?"
11680 LOCATE 7,10:PRINT "THIS IS THE NUMBER OF PERSONNEL THAT WILL PARTICIPATE"
11690 LOCATE 9,10:PRINT "IN THE SOURCE SELECTION PROCESS."
11700 GOSUB 2620:CLS:GOTO 5660
11710 REM        THIS IS THE HELP FOR QUESTION 3 ON SCREEN 7
11720 CLS:LOCATE 2,5:PRINT "QUESTION 3,SCREEN 7"
11730 LOCATE 4,5:PRINT "WHAT IS THEIR AVERAGE GRADE?"
 740 LOCATE 7,10:PRINT "DETERMINE THE AVERAGE GRADE OF THE SOURCE SELECTION"
1750 LOCATE 9,10:PRINT "TEAM AND ENTER A WHOLE NUMBER FROM 7 TO 15."
11760 GOSUB 2620:CLS:GOTO 5660
11770 REM        THIS IS THE HELP FOR QUESTION 4 ON SCREEN 7
11780 CLS:LOCATE 2,5:PRINT "QUESTION 4,SCREEN 7"
11790 LOCATE 4,5:PRINT "MONTHS OF SPO CBO MGT RESPONSIBILITY IS...?"
11800 LOCATE 7,10:PRINT "THIS IS THE TOTAL TIME FROM BEGINNING SCREENING TO"
11810 LOCATE 9,10:PRINT "DELIVERY OF THE FINAL CBO ITEM TO THE PRIME.  ENTER"
11820 LOCATE 11,10:PRINT "THE NUMBER OF MONTHS REQUIRED OF THIS ACTIVITY."
11830 LOCATE 13,10:PRINT "
11840 GOSUB 2620:CLS:GOTO 5660
11850 REM        THIS IS THE HELP FOR QUESTION 5 ON SCREEN 7
11860 CLS:LOCATE 2,5:PRINT "QUESTION 5,SCREEN 7"
11870 LOCATE 4,5:PRINT "AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS...?"
11880 LOCATE 7,10:PRINT "THIS IS AN ESTIMATE OF THE TIME DEVOTED TO THE "
11890 LOCATE 9,10:PRINT "MANAGEMENT OF THE CBO ITEMS BY THE SPO.  ENTER"
11900 LOCATE 11,10:PRINT "THE AVERAGE NUMBER OF HOURS DEVOTED TO THE "
11910 LOCATE 13,10:PRINT "MANAGEMENT OF THE CBO ITEMS BY SPO PERSONNEL."
11920 GOSUB 2620:CLS:GOTO 5660
11930 REM        THIS IS THE HELP FOR QUESTION 6 ON SCREEN 7
11940 CLS:LOCATE 2,5:PRINT "QUESTION 6,SCREEN 7"
11950 LOCATE 4,5:PRINT "AVE. GRADE OF THE SPO CBO MANAGEMTN TEAM IS...?"
11960 LOCATE 7,10:PRINT "THIS IS THE AVERAGE GRADE OF THE SPO TEAM RESPONSIBLE"
11970 LOCATE 9,10:PRINT "FOR THE MANAGEMENT OF THE CBO ITEMS FROM THE START"
11980 LOCATE 11,10:PRINT "OF SCREENING TO THE DELIVERY TO THE PRIME."
 990 GOSUB 2620:CLS:GOTO 5660
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12000 REM       THIS IS THE HELP FOR QUESTION 7 ON SCREEN 7
12010 CLS:LOCATE 2,5:PRINT "QUESTION 7,SCREEN 7"
12020 LOCATE 4,5:PRINT "HOW MANY SOLICITATION SETS WILL BE SENT OUT?"
12030 LOCATE 7,10:PRINT "THE SOLICITATION OR BID SETS ARE THOSE PACKAGES THAT"
12040 LOCATE 9,10:PRINT "ARE PREPARED BY THE GOVERNMENT TO SOLICIT BIDS FROM"
12050 LOCATE 11,10:PRINT "POTENTIALLY INTERESTED VENDORS.  THESE SETS DESCRIBE"
12060 LOCATE 13,10:PRINT "THE AIR FORCE REQUIREMENTS AND THE PROPOSED CONTRAC-"
12070 LOCATE 15,10:PRINT "TING APPROACH TO THE PROCUREMENT."
12080 LOCATE 19,10:PRINT "THESE SOLICITATION SETS GENERALLY COST $10.00 EACH."
12090 LOCATE 21,10:PRINT "ENTER THE NUMBER OF BID SETS PRODUCED."
12100 GOSUB 2620:CLS:GOTO 5660
12110 REM       THIS IS THE HELP FOR QUESTION 8 ON SCREEN 7
12120 CLS:LOCATE 2,5:PRINT "QUESTION 8,SCREEN 7"
12130 LOCATE 4,5:PRINT "WHAT IS THE AVE. NO. OF PERSONNEL IN THE SPO?"
12140 LOCATE 7,10:PRINT "THIS IS THE NUMBER OF PERSONNEL IN THE SPO FROM ITS"
12150 LOCATE 9,10:PRINT "BEGINNING AS DETERMINED BY THE BEGINNING OF A BUDGET"
12160 LOCATE 11,10:PRINT "TO THE END OF THE CURRENT BUDGET.  COMPUTE THE "
12170 LOCATE 13,10:PRINT "AVERAGE NUMBER OF SPO PERSONNEL DURING THIS PERIOD."
12180 LOCATE 15,10:PRINT "                ENTER THIS NUMBER."
12190 GOSUB 2620:CLS:GOTO 5660
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A. COMPUTER PROGRAMS

A.3 CALCULI

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10 REM       THIS IS THE CALCULATIONS PROGRAM
20 REM            .........CALCUU.BAS........
30 DIM A1$(10),A2$(10),A3$(10),A4$(10),A5$(10),A6$(10),A7$(10),A8$(10)
40 DIM A1(10),A2(10),A3(10),A4(10),A5(10),A6(10),A7(10),A8(10)
50 CLS
60 KEY OFF
70 REM   THIS IS A SQUARE SCREEN PROGRAM
80 CLS
90 LOCATE 3,5
100 PRINT "    ------------------------------------------------------------
   "
110 LOCATE 4,5
120 PRINT "  ////////////////////////////////////////////////////////////
///!"
130 LOCATE 5,5
140 PRINT " ////////////////////////////////////////////////////////////
///!"
150 LOCATE 6,5
160 PRINT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!/!"
170 FOR I = 7 TO 23
180 LOCATE I,5
190 PRINT "!!
 !/!"
200 NEXT I
210 LOCATE 9,5
  ) PRINT "!!                          COMPONENT BREAKOUT
 !/!"
230 LOCATE 13,5
240 PRINT "!!                       OFFSETTING COST MODELING
 !/!"
250 LOCATE 17,5
260 PRINT "!!                         COMPUTATIONAL RESULTS
 !/!"
270 LOCATE 21,5
280 PRINT "!!
 !/!"
290 LOCATE 22,5
300 PRINT "!!   by PJSA,Inc.                                        1987
 !/!"
310 LOCATE 24,5
320 PRINT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
 !/"
330 BEEP
340 I = 1 : FOR I = 1 TO 2000:NEXT:CLS
350 REM
360 KEY OFF
370 CLS
380 LOCATE 3,10
390 PRINT "**************************************************************"
```

```
4   LOCATE 4,10
410 PRINT "*                                                                *"
420 LOCATE 5,10
430 PRINT "*                THE FOLLOWING FILES ARE AVAILABLE               *
440 LOCATE 6,10
450 PRINT "*                                                                *"
460 LOCATE 7,10
470 PRINT "********************************************************************** "
480 LOCATE 9,5:FILES "*.DAT"
490 LOCATE 20,15
500 INPUT "WHAT PROGRAM DO YOU WISH TO RUN (NAME.DAT)";NAMNO$
510 REM
520 KEY OFF
530 REM     ************************************************************
540 REM             THIS IS THE COST ESTIMATING SECTION FOR THE SPO
550 REM     ************************************************************
560 KEY OFF
570 REM     ************************************************************
580 REM  THIS SECTION ENTERS PREVIOUS DATA INTO THE MODEL FOR CALCULATION.
590 REM     ************************************************************
600 OPEN NAMNO$   FOR INPUT AS #1
610 FOR I = 1 TO 7
620 INPUT #1,A1$(I),A2$(I),A3$(I),A4$(I),A5$(I),A6$(I),A7$(I),A8$(I)
630 NEXT
640 CLOSE #1
650 A1(1)=VAL(A1$(1)):A2(1)=VAL(A2$(1)):A3(1)=VAL(A3$(1)):A4(1)=VAL(A4$(1))
660 A5(1)=VAL(A5$(1)):A6(1)=VAL(A6$(1)):A7(1)=VAL(A7$(1)):A8(1)=VAL(A8$(1))
670 A3(2)=VAL(A3$(2)):A4(2)=VAL(A4$(2)):A5(2)=VAL(A5$(2)):A6(2)=VAL(A6$(2))
680 A7(2)=VAL(A7$(2))
690 A3(3)=VAL(A3$(3)):A6(3)=VAL(A6$(3)):A7(3)=VAL(A7$(3)):A8(3)=VAL(A8$(3))
700 A2(4)=VAL(A2$(4)):A3(4)=VAL(A3$(4)):A4(4)=VAL(A4$(4)):A5(4)=VAL(A5$(4))
710 A7(4)=VAL(A7$(4)):A8(4)=VAL(A8$(4)):
720 A3(5)=VAL(A3$(5))
730 A4(5)=VAL(A4$(5)):A5(5)=VAL(A5$(5)):A6(5)=VAL(A6$(5)):A7(5)=VAL(A7$(5))
740 A8(5)=VAL(A8$(5))
750 A1(6)=VAL(A1$(6)):A2(6)=VAL(A2$(6)):A3(6)=VAL(A3$(6)):A4(6)=VAL(A4$(6))
760 A5(6)=VAL(A5$(6)):A6(6)=VAL(A6$(6)):A7(6)=VAL(A7$(6)):A8(6)=VAL(A8$(6))
770 A1(7)=VAL(A1$(7)):A2(7)=VAL(A2$(7)):A3(7)=VAL(A3$(7)):A4(7)=VAL(A4$(7))
780 A5(7)=VAL(A5$(7)):A6(7)=VAL(A6$(7)):A7(7)=VAL(A7$(7)):A8(7)=VAL(A8$(7))
790 REM THIS IS THE SCREENING COST SECTION
800 REM
810 KEY OFF
820 CLS
830 REM     ************************************************************
840 REM                     THIS IS THE SCREENING COST SECTION
850 REM     ************************************************************
860 REM  A1(1)--NO. OF PEOPLE INVOLVED IN SCREENING.
870 REM  A2(1)--AVERAGE GRADE OF PEOPLE INVLOLVED IN SCREENING.
880 REM  A3(1)--TOTAL TIME IN WEEKS OF SCREENING PROCESS.
890 REM  A4(1)--PERCENTAGE OF TIME SPENT IN SCREENING PROCESS.
```

```
5    REM THIS IS THE CALCULATION OF THE PERSONNEL REQUIRED HOURS FOR SCREENING.
910 SH=A1(1)*A3(1)*A4(1)*(.01)*(40)*(1760/2080)
920 REM
930 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
940 REM
950 IF A2(1)=7 THEN SAS=25546:GOTO 1020
960 IF A2(1)=9 THEN SAS=31255:GOTO 1020
970 IF A2(1)=11 THEN SAS=33985!:GOTO 1020
980 IF A2(1)=12 THEN SAS=36889!:GOTO 1020
990 IF A2(1)=13 THEN SAS=42611!:GOTO 1020
1000 IF A2(1)=14 THEN SAS=50354!:GOTO 1020
1010 IF A2(1)=15 THEN SAS=59234!:GOTO 1020
1020 REM
1030 REM THIS IS THE ANNUAL SUPPORT COSTS PER PERSON
1040 REM
1050 CE=4652.05:REM CE--CIVIL ENGINEERING COSTS
1060 MAT=8316!:REM MAT--MATERIAL COSTS
1070 EQP=49.2:REM EQP--EQUIPMENT COSTS
1080 MTM=4602.54:REM MTM--MATERIAL MARKUP COSTS
1090 MOV=277.31:REM MOV--MATERIAL OVERHEAD COSTS
1100 GA=2599.59:REM GA--G & A COSTS
1110 TVL=6070!:REM TVL--TRAVEL COSTS
1120 TEL=956.1:REM TEL--TELEPHONE COSTS
1130 REM
1140 REM THE ABOVE FIGURES WERE OBTAINED FROM ASD STUDIES.
1  0 REM
1160 SCPP=CE+MAT+EQP+MTM+MOV+GA+TVL+TEL  :REM ANNUAL SUPPORT COST/PERSON
1170 SCPT=SCPP*SH*(1/1760)
1180 SCPI=SCPT*(100+A7(1))*(.01)
1190 SCPPH=SCPP*(1/1760)
1200 REM
1210 REM THIS IS THE SCREENING PERSONNEL SALARY COSTS CALCULATION
1220 REM
1230 SCC=SH*(SAS)*(1/1760)+SCPPH*SH:SCC1=SH*(SAS)*(1/1760)
1240 SCI=SCC*(100+A7(1))*(.01):SCI1=SCC1*(100+A7(1))*(.01)
1250 SCIF=SCI1*(A8(1))*(.01)
1251 REM    ************************************************************
1252 REM                          PRICE ANALYSIS
1253 REM    ************************************************************
1260 REM
1270 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
1280 REM
1290 IF A3(2)=7 THEN SES=25546:GOTO 1360
1300 IF A3(2)=9 THEN SES=31255:GOTO 1360
1310 IF A3(2)=11 THEN SES=33985!:GOTO 1360
1320 IF A3(2)=12 THEN SES=36889!:GOTO 1390
1330 IF A3(2)=13 THEN SES=42611!:GOTO 1360
1340 IF A3(2)=14 THEN SES=50354!:GOTO 1360
1350 IF A3(2)=15 THEN SES=59234!:GOTO 1360
1360 REM
1  0 REM A1(2)...PRICE ANALYSIS (Y/N)
```

```
1400 REM A2(2)...LEVEL I (Y/N)
1410 REM A3(2)...AVE. GRADE
1420 REM A2(4)...NO. OF CLASS 1 DRAWINGS
1430 IF A1$(2)="N" GOTO 1500
1440 IF A2$(2)="Y" GOTO 1460
1450 PAH=A2(4)*(12.5/15)+8.33:GOTO 1470
1460 PAH=A2(4)*(1/15)+.667
1470 PAC=PAH*SES*(1/1760)+PAH*SCPPH:PAC1=PAH*SES*(1/1760)
1480 PACI=PAC*(100+A7(1))*(.01):PACI1=PAC1*(100+A7(1))*(.01)
1490 PACIF=PACI1*(A8(1))*(.01):GOTO 1510
1500 PAH=0:PACI=0:PACIF=0:GOTO 1510
1510 REM     ************************************************************
1520 REM                          SOURCE APPROVAL MODEL
1530 REM     ************************************************************
1540 REM A4(2)...NUMBER OF SOURCE APPROVALS
1550 REM A5(2)...PLANT VISITS FOR SA
1560 REM A6(2)...NUMBER OF VISITORS
1570 REM A7(2)...AVE. GRADE OF VISITORS
1580 REM
1590 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
1600 REM
1610 IF A7(2)=7 THEN SAS=25546:GOTO 1680
1620 IF A7(2)=9 THEN SAS=31255:GOTO 1680
1630 IF A7(2)=11 THEN SAS=33985!:GOTO 1680
1640 IF A7(2)=12 THEN SAS=36889!:GOTO 1680
1650 IF A7(2)=13 THEN SAS=42611!:GOTO 1680
1660 IF A7(2)=14 THEN SAS=50354!:GOTO 1680
1670 IF A7(2)=15 THEN SAS=59234!:GOTO 1680
1680 REM
1690 IF A4(2)=0 GOTO 1800
1700 SAH=A4(2)*20
1710 SAVH=A5(2)*A6(2)*20
1720 SAC=(SAH+SAVH)*SAS*(1/1760)+(SAH+SAVH)*(SCPPH)
1730 SAC1=(SAH+SAVH)*SAS*(1/1760)
1740 SACI=SAC*(100+A7(1))*(.01)
1750 SACI1=SAC1*(100+A7(1))*(.01)
1760 SACIF=SACI1*(A8(1))*(.01)
1770 REM     ************************************************************
1780 REM                            SOURCE DEVELPMENT
1790 REM     ************************************************************
1800 REM A2(6)...NUMBER OF SOURCE DEVELOPMENTS
1810 REM A3(6)...NUMBER OF PLANT VISITS
1820 REM A4(6)...NUMBER OF VISITORS
1830 REM A5(6)...AVERAGE GRADE OF VISITORS
1840 IF A5(6)=7 THEN SDS=25546:GOTO 1910
1850 IF A5(6)=9 THEN SDS=31255:GOTO 1910
1860 IF A5(6)=11 THEN SDS=33985!:GOTO 1910
1870 IF A5(6)=12 THEN SDS=36889!:GOTO 1910
1880 IF A5(6)=13 THEN SDS=42611!:GOTO 1910
1890 IF A5(6)=14 THEN SDS=50354!:GOTO 1910
```

```
1900 IF A5(6)=15 THEN SDS=59234!:GOTO 1910
1910 REM
1920 IF A2(6)=0 GOTO 2010
1930 SDH=A2(6)*120
1940 SDVH=A3(6)*A4(6)*20
1950 SDC=(SDH+SDVH)*SDS*(1/1760)+SCPPH*(SDH+SDVH)
1960 SDC1=(SDH+SDVH)*SDS*(1/1760)
1970 SDCI=SDC*(100+A7(1))*(.01)
1980 SDCI1=SDC1*(100+A7(1))*(.01)
1990 SDCIF=SDCI1*(A8(1))*(.01)
2000 REM     ************************************************************
2010 REM                        SOURCE SELECTION MODEL
2020 REM     ************************************************************
2030 REM A1(7)...NUMBER OF PROPOSALS IN SOURCE SELECTION
2040 REM A2(7)...NO. OF PERSONS ON SOURCE SELECTION TEAM
2050 REM A3(7)...AVERAGE GRADE
2060 REM A5(1)...PRIME COST OF CBO ITEM(S)
2070 REM
2080 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
2090 REM
2100 IF A3(7)=7 THEN SSS=25546:GOTO 2170
2110 IF A3(7)=9 THEN SSS=31255:GOTO 2170
2120 IF A3(7)=11 THEN SSS=33985!:GOTO 2170
2130 IF A3(7)=12 THEN SSS=36889!:GOTO 2170
2140 IF A3(7)=13 THEN SSS=42611!:GOTO 2170
2150 IF A3(7)=14 THEN SSS=50354!:GOTO 2170
2160 IF A3(7)=15 THEN SSS=59234!:GOTO 2170
2170 IF A1(7) < 2 GOTO 2230
2180 SSH=(1/20000)*A5(1)*SQR(A1(7))
2190 SSC=SSH*SSS*(1/1760)+SSH*(SCPPH)
2200 SSC1=SSH*SSS*(1/1760)
2210 SSCI=SSC*(100+A7(1))*(.01)
2220 SSCI1=SSC1*(100+A7(1))*(.01)
2230 SSCIF=SSCI1*(A8(1))*(.01)
2240 REM     ************************************************************
2250 REM                          REVERSE ENGINEERING MODEL
2260 REM     ************************************************************
2270 REM A1(3)...REVERSE ENGR.  (Y/N)
2280 REM A2(3)...LEVEL I  (Y/N)
2290 REM A3(3)...AVE. GRADE OF ENGINEERS
2300 REM A2(4)...NUMBER OF DRAWINGS
2310 IF A1$(3)="N" GOTO 2440
2320 IF A2$(3)="N" GOTO 2380
2330 REM
2340 REM LEVEL I
2350 REM
2360 REH=(.1)*A2(4):GOTO 2410
2370 REM
2380 REM LEVEL II
2390 REM
```

```
1400 REM A2(2)...LEVEL I (Y/N)
1410 REM A3(2)...AVE. GRADE
1420 REM A2(4)...NO. OF CLASS 1 DRAWINGS
1430 IF A1$(2)="N" GOTO 1500
1440 IF A2$(2)="Y" GOTO 1460
1450 PAH=A2(4)*(12.5/15)+8.33:GOTO 1470
1460 PAH=A2(4)*(1/15)+.667
1470 PAC=PAH*SES*(1/1760)+PAH*SCPPH:PAC1=PAH*SES*(1/1760)
1480 PACI=PAC*(100+A7(1))*(.01):PACI1=PAC1*(100+A7(1))*(.01)
1490 PACIF=PACI1*(A8(1))*(.01):GOTO 1510
1500 PAH=0:PACI=0:PACIF=0:GOTO 1510
1510 REM     ************************************************************
1520 REM                          SOURCE APPROVAL MODEL
1530 REM     ************************************************************
1540 REM A4(2)...NUMBER OF SOURCE APPROVALS
1550 REM A5(2)...PLANT VISITS FOR SA
1560 REM A6(2)...NUMBER OF VISITORS
1570 REM A7(2)...AVE. GRADE OF VISITORS
1580 REM
1590 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
1600 REM
1610 IF A7(2)=7 THEN SAS=25546:GOTO 1680
1620 IF A7(2)=9 THEN SAS=31255:GOTO 1680
1630 IF A7(2)=11 THEN SAS=33985!:GOTO 1680
1640 IF A7(2)=12 THEN SAS=36889!:GOTO 1680
1650 IF A7(2)=13 THEN SAS=42611!:GOTO 1680
1660 IF A7(2)=14 THEN SAS=50354!:GOTO 1680
1670 IF A7(2)=15 THEN SAS=59234!:GOTO 1680
1680 REM
1690 IF A4(2)=0 GOTO 1800
1700 SAH=A4(2)*20
1710 SAVH=A5(2)*A6(2)*20
1720 SAC=(SAH+SAVH)*SAS*(1/1760)+(SAH+SAVH)*(SCPPH)
1730 SAC1=(SAH+SAVH)*SAS*(1/1760)
1740 SACI=SAC*(100+A7(1))*(.01)
1750 SACI1=SAC1*(100+A7(1))*(.01)
1760 SACIF=SACI1*(A8(1))*(.01)
1770 REM     ************************************************************
1780 REM                            SOURCE DEVELPMENT
1790 REM     ************************************************************
1800 REM A2(6)...NUMBER OF SOURCE DEVELOPMENTS
1810 REM A3(6)...NUMBER OF PLANT VISITS
1820 REM A4(6)...NUMBER OF VISITORS
1830 REM A5(6)...AVERAGE GRADE OF VISITORS
1840 IF A5(6)=7 THEN SDS=25546:GOTO 1910
1850 IF A5(6)=9 THEN SDS=31255:GOTO 1910
1860 IF A5(6)=11 THEN SDS=33985!:GOTO 1910
1870 IF A5(6)=12 THEN SDS=36889!:GOTO 1910
1880 IF A5(6)=13 THEN SDS=42611!:GOTO 1910
1890 IF A5(6)=14 THEN SDS=50354!:GOTO 1910
```

```
1900 IF A5(6)=15 THEN SDS=59234!:GOTO 1910
1910 REM
1920 IF A2(6)=0 GOTO 2010
1930 SDH=A2(6)*120
1940 SDVH=A3(6)*A4(6)*20
1950 SDC=(SDH+SDVH)*SDS*(1/1760)+SCPPH*(SDH+SDVH)
1960 SDC1=(SDH+SDVH)*SDS*(1/1760)
1970 SDCI=SDC*(100+A7(1))*(.01)
1980 SDCI1=SDC1*(100+A7(1))*(.01)
1990 SDCIF=SDCI1*(A8(1))*(.01)
2000 REM     ************************************************************
2010 REM                        SOURCE SELECTION MODEL
2020 REM     ************************************************************
2030 REM A1(7)...NUMBER OF PROPOSALS IN SOURCE SELECTION
2040 REM A2(7)...NO. OF PERSONS ON SOURCE SELECTION TEAM
2050 REM A3(7)...AVERAGE GRADE
2060 REM A5(1)...PRIME COST OF CBO ITEM(S)
2070 REM
2080 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
2090 REM
2100 IF A3(7)=7 THEN SSS=25546:GOTO 2170
2110 IF A3(7)=9 THEN SSS=31255:GOTO 2170
2120 IF A3(7)=11 THEN SSS=33985!:GOTO 2170
2130 IF A3(7)=12 THEN SSS=36889!:GOTO 2170
2140 IF A3(7)=13 THEN SSS=42611!:GOTO 2170
2150 IF A3(7)=14 THEN SSS=50354!:GOTO 2170
2160 IF A3(7)=15 THEN SSS=59234!:GOTO 2170
2170 IF A1(7) < 2 GOTO 2230
2180 SSH=(1/20000)*A5(1)*SQR(A1(7))
2190 SSC=SSH*SSS*(1/1760)+SSH*(SCPPH)
2200 SSC1=SSH*SSS*(1/1760)
2210 SSCI=SSC*(100+A7(1))*(.01)
2220 SSCI1=SSC1*(100+A7(1))*(.01)
2230 SSCIF=SSCI1*(A8(1))*(.01)
2240 REM     ************************************************************
2250 REM                          REVERSE ENGINEERING MODEL
2260 REM     ************************************************************
2270 REM A1(3)...REVERSE ENGR.  (Y/N)
2280 REM A2(3)...LEVEL I  (Y/N)
2290 REM A3(3)...AVE. GRADE OF ENGINEERS
2300 REM A2(4)...NUMBER OF DRAWINGS
2310 IF A1$(3)="N" GOTO 2440
2320 IF A2$(3)="N" GOTO 2380
2330 REM
2340 REM LEVEL I
2350 REM
2360 REH=(.1)*A2(4):GOTO 2410
2370 REM
2380 REM LEVEL II
2390 REM
```

```
2400 REH=4*A2(4)
2410 REC=REH*(36889!)*(1/1760)+REH*(SCPPH)
2420 REC1=REH*(36889!)*(1/1760)
2430 RECI=REC*(100+A7(1))*(.01)
2440 RECI1=REC1*(100+A7(1))*(.01)
2450 RECIF=RECI1*(A8(1))*(.01)
2460 REM     ************************************************************
2470 REM                          FIRST ARTICLE MODEL
2480 REM     ************************************************************
2490 REM A6(4)...WILL THERE BE A FRIST ARTICLE
2500 REM A7(4)...NUMBER OF PERSONNEL
2510 REM A8(4)...AVERAGE GRADE OF FA PERSONNEL
2520 REM A2(4)...NUMBER OF DRAWINGS
2530 REM
2540 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
2550 REM
2560 IF A8(4)=7 THEN SFA=25546:GOTO 2630
2570 IF A8(4)=9 THEN SFA=31255:GOTO 2630
2580 IF A8(4)=11 THEN SFA=33985!:GOTO 2630
2590 IF A8(4)=12 THEN SFA=36889!:GOTO 2630
2600 IF A8(4)=13 THEN SFA=42611!:GOTO 2630
2610 IF A8(4)=14 THEN SFA=50354!:GOTO 2630
2620 IF A8(4)=15 THEN SFA=59234!:GOTO 2630
2630 IF A6$(4)="N" GOTO 2670
2640 FAH=20+SQR(A2(4))
2650 FAC=FAH*(SFA)*(1/1760)+FAH*(SCPPH)
2660 FAC1=FAH*(SFA)*(1/1760)
2670 FACI=FAC*(100+A7(1))*(.01)
2680 FACI1=FAC1*(100+A7(1))*(.01)
2690 FACIF=FACI1*(A8(1))*(.01)
2700 REM     ************************************************************
2710 REM       THIS IS THE CONTRACTING COSTS OF PROCURING THE CBO ITEMS
2720 REM     ************************************************************
2730 REM
2740 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
2750 REM
2760 IF A1(6)=7 THEN SES=25546:GOTO 2830
2770 IF A1(6)=9 THEN SES=31255:GOTO 2830
2780 IF A1(6)=11 THEN SES=33985!:GOTO 2830
2790 IF A1(6)=12 THEN SES=36889!:GOTO 2830
2800 IF A1(6)=13 THEN SES=42611!:GOTO 2830
2810 IF A1(6)=14 THEN SES=50354!:GOTO 2830
2820 IF A1(6)=15 THEN SES=59234!:GOTO 2830
2830 REM
2840 REM CONTRACTING FUNCTIONS COST ANALYSIS
2850 REM          AB$(2)...SOLE SOURCE (Y/N)
2860 REM
2870 IF A8$(2)="N" GOTO 3080
2880 IF A5(1) < 25000 GOTO 2980
2890 IF A5(1) < 100000! GOTO 2990
```

```
2900 IF A5(1) < 500000! GOTO 3000
 910 IF A5(1) <1000000! GOTO 3010
2920 IF A5(1) <3500000! GOTO 3020
2930 IF A5(1) <10000000# GOTO 3030
2940 IF A5(1) <25000000# GOTO 3040
2950 IF A5(1) <100000000# GOTO 3050
2960 IF A5(1) <200000000# GOTO 3060
2970 IF A5(1)=>200000000# GOTO 3070
2980 CONH=55  : GOTO 3280
2990 CONH=125 : GOTO 3280
3000 CONH=150 : GOTO 3280
3010 CONH=245 : GOTO 3280
3020 CONH=375 : GOTO 3280
3030 CONH=450 : GOTO 3280
3040 CONH=520 : GOTO 3280
3050 CONH=575 : GOTO 3280
3060 CONH=635 : GOTO 3280
3070 CONH=800 : GOTO 3280
3080 IF A5(1) < 25000 GOTO 3180
3090 IF A5(1) < 100000! GOTO 3190
3100 IF A5(1) < 500000! GOTO 3200
3110 IF A5(1) <1000000! GOTO 3210
3120 IF A5(1) <3500000! GOTO 3220
3130 IF A5(1) <10000000# GOTO 3230
3140 IF A5(1) <25000000# GOTO 3240
3150 IF A5(1) <100000000# GOTO 3250
 160 IF A5(1) <200000000# GOTO 3260
3170 IF A5(1)=>200000000# GOTO 3270
3180 CONH=55  : GOTO 3280
3190 CONH=125 : GOTO 3280
3200 CONH=250 : GOTO 3280
3210 CONH=335 : GOTO 3280
3220 CONH=1725: GOTO 3280
3230 CONH=2600: GOTO 3280
3240 CONH=2600: GOTO 3280
3250 CONH=3875: GOTO 3280
3260 CONH=4850: GOTO 3280
3270 CONH=6000: GOTO 3280
3280 CONC=SES*(CONH)*(1/1760)+CONH*(SCPPH)
3290 CONC1=SES*(CONH)*(1/1760)
3300 CONCI=CONC*(100+A7(1))*(.01)
3310 CONCI1=CONC1*(100+A7(1))*(.01)
3320 CONCIF=CONCI1*(A8(1))*(.01)
3330 REM    ************************************************************
3340 REM                              PRE AWARD SURVEY
3350 REM    ************************************************************
3360 REM A4(3)...SURVEY  (Y/N)
3370 REM A5(3)...ON SITE VISITS (Y/N)
3380 REM A6(3)...NUMBER OF VISITS
3390 REM A7(3)...NUMBER OF PERSONNEL ON VISITS
```

```
3400 REM AB(3)...AVERAGE GRADE OF VISITORS
3410 REM
3420 REM THESE ARE THE SALARIES FOR THE EMPLOYEES AND ARE STEP 5 NUMBERS.
3430 REM
3440 IF A8(3)=7 THEN SPA=25546:GOTO 3510
3450 IF A8(3)=9 THEN SPA=31255:GOTO 3510
3460 IF A8(3)=11 THEN SPA=33985!:GOTO 3510
3470 IF A8(3)=12 THEN SPA=36889!:GOTO 3510
3480 IF A8(3)=13 THEN SPA=42611!:GOTO 3510
3490 IF A8(3)=14 THEN SPA=50354!:GOTO 3510
3500 IF A8(3)=15 THEN SPA=59234!:GOTO 3510
3510 IF A4$(3)="N" GOTO 3530
3520 IF A5$(3)="N" THEN GOTO 3540 ELSE GOTO 3550
3530 HRRS=0:GOTO 3560
3540 HRRS=5:GOTO 3560
3550 HRRS=11:GOTO 3560
3560 PRH=A6(3)*A7(3)*(HRRS)
3570 PRC=PRH*(SPA)*(1/1760)+PRH*(SCPPH)
3571 PRC1=PRH*(SPA)*(1/1760)
3580 PRCI=PRC*(100+A7(1))*(.01)
3581 PRCI1=PRC1*(100+A7(1))*(.01)
3590 PRCIF=PRCI*(100+A8(1))*(.01)
3600 REM     ************************************************************
3610 REM                    GENERAL SPO COSTS FOR MANAGEMENT OF CBO
3620 REM     ************************************************************
3630 REM A4(7)...LIFE OF CBO
3640 REM A5(7)...AVE. HRS/MO ON CBO
3650 REM A6(7)...AVE. SPO MGT GRADE
3660 IF A6(7)=7 THEN SMS=25546:GOTO 3730
3670 IF A6(7)=9 THEN SMS=31255:GOTO 3730
3680 IF A6(7)=11 THEN SMS=33985!:GOTO 3730
3690 IF A6(7)=12 THEN SMS=36889!:GOTO 3730
3700 IF A6(7)=13 THEN SMS=42611!:GOTO 3730
3710 IF A6(7)=14 THEN SMS=50354!:GOTO 3730
3720 IF A6(7)=15 THEN SMS=59234!:GOTO 3730
3730 REM
3740 MGH=A4(7)*(A6(7))
3750 MGC=MGH*(SMS)*(1/1760)+MGH*(SCPPH)
3760 MGC1=MGH*(SMS)*(1/1760)
3770 MGCI=MGC*(100+A7(1))*(.01)
3780 MGCI1=MGC1*(100+A7(1))*(.01)
3790 MGCIF=MGCI1*(A8(1))*(.01)
3800 REM     ************************************************************
3810 REM                              SPO TOTAL COSTS
3820 REM     ************************************************************
3830 REM
3840 REM       TOTAL SPO HOURS FOR CBO
3850 REM
3860 HRT=SH+PAH+SAH+SDH+SSH+REH+FAH+CONH+MGH+PRH
3870 REM
3880 REM       SUPPORT COSTS FOR SPO ACTIVITY
3890 REM
```

```
3900 SUPT=HRT*(1/1760)*SCPP
3910 SUPTI=SUPT*(100+A7(1))*(.01)
3920 SUPTIF=SUPTI*(100+A8(1))*(.01)
3930 REM
3940 REM       TOTAL SPO COSTS FOR CBO
3950 REM
3960 SPOC=SCC+PAC+SAC+SDC+SSC+REC+FAC+CONC+MGC+PRC
3970 REM
3980 REM       TOTAL SPO INFLATED COSTS FOR CBO
3990 REM
4000 SPOCI=SCI+PACI+SACI+SDCI+SSCI+RECI+FACI+CONCI+MGCI+PRCI
4010 REM
4020 REM       TOTAL SPO INFLATED COSTS WITH FRINGES FOR CBO
4030 REM
4040 SPOCIF=SCIF+PACIF+SACIF+SDCIF+SSCIF+RECIF+FACIF+CONCIF+MGCIF+PRCIF
4050 REM
4060 REM       TOTAL SPO COSTS INCLUDING SUPPORT
4070 REM
4080 TOTC=SUPT+SPOC
4090 REM
4100 REM       TOTAL INFLATED SPO COSTS INCLUDING SUPPORT
4110 REM
4120 TOTCI=SUPTI+SPOCI
4130 REM
  40 REM       TOTAL INFLATED AND FRINGES SPO COSTS INCLUDING SUPPORT
4150 REM
4160 TOTCIF=SUPTIF+SPOCIF
4170 TOTH=SH+PAH+SAH+SDH+SSH+REH+FAH+CONH+MGH+PRH
4180 TOTC=SCC+PAC+SAC+SDC+SSC+REC+FAC+CONC+MGC+PRC
4190 TOTI=SCI+PACI+SACI+SDCI+SSCI+RECI+FACI+CONCI+MGCI+PRCI
4200 TOTIF=SCIF+PACIF+SACIF+SDCIF+SSCIF+RECIF+FACIF+CONCIF+MGCIF+PRCIF
4210 SCCT=SCI+SCIF
4220 PACT=PACI+PACIF
4230 SACT=SACI+SACIF
4240 SDCT=SDCI+SDCIF
4250 SSCT=SSCI+SSCIF
4260 RECT=RECI+RECIF
4270 FACT=FACI+FACIF
4280 CONCT=CONCI+CONCIF
4290 MGCT=MGCI+MGCIF
4300 PRCT=PRCI+PRCIF
4310 SPOT=SPOCI+SPOCIF
4320 REM
4330 TOTTT=SCCT+PACT+SACT+SDCT+SSCT+RECT+FACT+CONCT+MGCT+PRCT
4340 REM     ************************************************************
435. REM                          ADMINISTRATION AND AUDIT
4360 REM     ************************************************************
4370 REM A6(1)...NEW CONTRACTOR CBO PRICE
4380 I  A6(1) < 300000! GOTO 4400
  90 [illegible]C=(.025)*A5(1):GOTO 4410
```

```
4400 ADAC=0
4410 ADACI=ADAC*(100+A7(1))*(.01)
4420 ADACIF=ADACI*(100+A8(1))*(.01)
4430 REM     ************************************************************
4440 REM                          GENERAL AND ADMIN COSTS
4450 REM     ************************************************************
4460 REM FROM ASD ESTIMATES $2599.59 PER PERSON PER YEAR
4470 REM     ************************************************************
4480 REM                             SECURITY COSTS
4490 REM     ************************************************************
4500 REM A6(6)...NUMBER OF EMPLOYEES
4510 REM A7(6)...CBO HIGHEST CLASSIFICATION
4520 REM A8(6)...NO. REQUIRING CLEARANCES
4530 IF A7$(6)="UNCLAS" GOTO 4570
4540 IF A7$(6)="CONF" GOTO 4580
4550 IF A7$(6)="SEC" GOTO 4590
4560 IF A7$(6)="TSEC" GOTO 4600
4570 SEC=0:GOTO 4620
4580 SEC=A6(6)*10+A7(6)*50:GOTO 4620
4590 SEC=A6(6)*20+A7(6)*200:GOTO 4620
4600 SEC=A6(6)*20+A7(6)*500:GOTO 4620
4610 REM     ************************************************************
4620 REM                               EEO SUPPORT
4630 REM     ************************************************************
4640 REM A1(5)...EEO SUPPORT (Y/N)
4650 REM A6(6)...NO OF EMPLOYEES
4660 IF A1$(5)="N" GOTO 4680
4670 EEOC=A6(6)*10:GOTO 4700
4680 EEOC=0
4690 REM     ************************************************************
4700 REM                          SOCIO-ECONOMIC SUPPORT
4710 REM     ************************************************************
4720 REM A2(5)...SOC-EC SUPPORT (Y/N)
4730 REM A6(6)...NO OF EMPLOYEES
4740 IF A2$(5)="N" GOTO 4760
4750 SOCEC=A6(6)*10:GOTO 4780
4760 SOCEC=0
4770 REM     ************************************************************
4780 REM                             WARANTEE COSTS
4790 REM     ************************************************************
4800 REM A3(5)...WARRANTEE COSTS
4810 WARC=A3(5)
4820 REM     ************************************************************
4830 REM                          TERMINATION COSTS
4840 REM     ************************************************************
4850 REM     ************************************************************
4860 REM A4(5)...TERMINATION COSTS
4870 TERMC=A4(5)
4880 REM     ************************************************************
4890 REM                          NEW EQUIPMENT COSTS
```

```
4900 REM     ************************************************************
4910 REM A7(5)...EQUIP/TOOL COSTS
4920 ETC=A7(5)
4930 REM     ************************************************************
4940 REM                      FACILITY MODIFICATION COSTS
4950 REM     ************************************************************
4960 REM A8(5)...FACILITY MOD COSTS
4970 FMODC=A8(5)
4980 REM     ************************************************************
4990 REM                            TRANSPORTATION
5000 REM     ************************************************************
5010 REM A5(5)...MILES TO TRAVEL
5020 REM A3(4)...WEIGHT OF CBO ITEM(S)
5030 REM A5(4)...VOLUME OF CBO ITEM(S)
5040 IF A3(4) > 1000 GOTO 5060
5050 TRANC=((1.1-.0083636*A3(4))*A3(4)*A5(5))/(100):GOTO 5080
5060 TRANC=-108.688+(9.269399*(A3(4)/100))+(.082285*A5(5))
5070 REM     ************************************************************
5080 REM                         SOLICITATION COSTS
5090 REM     ************************************************************
5100 REM A7(7)...SOLICITATIONS SENT OUT
5110 SOLC=10*A7(7)
5120 REM     ************************************************************
5130 REM                       NEW CONTRACTOR PRICE
 140 REM     ************************************************************
5150 REM A6(1)...NEW CONTRACTOR'S COST
5160 NCONC=A6(1)
5170 REM     ************************************************************
5180 REM                    OFFSETTING COST COMPUTATION
5190 REM     ************************************************************
5200 REM A4(4)...TOTAL SPO BUDGET
5210 REM A5(4)...TOTAL SPO TIME IN MONTHS
5220 REM A6(1)...NEW CONTRACTOR'S COST
5230 REM A8(7)...TOTAL NO OF SPO PERSONNEL
5240 SPOPH=(A8(7)*A5(4)*146.66)
5250 SPOPHC=A4(4)/SPOPH
5260 SPOCST=SPOPHC*HRT
5270 CBOPHC=(A5(1)-A6(1))
5280 CBFC=(SPOCST-CBOPHC):REM CBO COSTS LOST OPPORTUNITY COST
5290 TCBOC=SPOC+SEC+EEOC+SOCEC+WARC+TERMC+ETC+FMODC+ADAC+TRANC+SOLC
5300 TCBFC=SPOT+SEC+EEOC+SOCEC+WARC+TERMC+ETC+FMODC+ADAC+TRANC+SOLC
5310 SAVEC=(A5(1)-A6(1))-TCBOC
5320 SAVEF=(A5(1)-A6(1))-TCBFC
5330 THEOC=SAVEC-CBFC
5340 THEOF=SAVEF-CBFC
5350 GOTO 6540
5360 REM     ************************************************************
5370 REM                      SCREEN OUTPUT OF COMPUTATIONS
5380 REM     ************************************************************
 390 CLS:LOCATE 2,35
```

```
5400 PRINT "SUMMARY DATA":LOCATE 4,25
5410 PRINT "HOURS        COST        INFLA        FRINGE        TOTAL"
5420 LOCATE 6,1:PRINT "SCREENING" :LOCATE 8,1:PRINT "PRICE ANAL"
5430 LOCATE 10,1:PRINT "SOURCE APP"
5440 LOCATE 12,1:PRINT "SOURCE DEV":LOCATE 14,1:PRINT "SOURCE SEL"
5450 LOCATE 16,1:PRINT "REVERSE ENG":LOCATE 18,1:PRINT "FIRST ART"
5460 LOCATE 20,1:PRINT "CONTRACTING":LOCATE 22,1:PRINT "GEN SPO"
5470 LOCATE 6,24:PRINT USING "#######";INT(SH)
5480 LOCATE 8,24:PRINT USING "#######";INT(PAH)
5490 LOCATE 10,24:PRINT USING "#######";INT(SAH)
5500 LOCATE 12,24:PRINT USING "#######";INT(SDH)
5510 LOCATE 14,24:PRINT USING "#######";INT(SSH)
5520 LOCATE 16,24:PRINT USING "#######";INT(REH)
5530 LOCATE 18,24:PRINT USING "#######";INT(FAH)
5540 LOCATE 20,24:PRINT USING "#######";INT(CONH)
5550 LOCATE 22,24:PRINT USING "#######";INT(MGH)
5560 LOCATE 6,35:PRINT USING "#######";INT(SCC)
5570 LOCATE 8,35:PRINT USING "#######";INT(PAC)
5580 LOCATE 10,35:PRINT USING "#######";INT(SAC)
5590 LOCATE 12,35:PRINT USING "#######";INT(SDC)
5600 LOCATE 14,35:PRINT USING "#######";INT(SSC)
5610 LOCATE 16,35:PRINT USING "#######";INT(REC)
5620 LOCATE 18,35:PRINT USING "#######";INT(FAC)
5630 LOCATE 20,35:PRINT USING "#######";INT(CONC)
5640 LOCATE 22,35:PRINT USING "#######";INT(MGC)
5650 LOCATE 6,47:PRINT USING "#######";INT(SCI)
5660 LOCATE 8,47:PRINT USING "#######";INT(PACI)
5670 LOCATE 10,47:PRINT USING "#######";INT(SACI)
5680 LOCATE 12,47:PRINT USING "#######";INT(SDCI)
5690 LOCATE 14,47:PRINT USING "#######";INT(SSCI)
5700 LOCATE 16,47:PRINT USING "#######";INT(RECI)
5710 LOCATE 18,47:PRINT USING "#######";INT(FACI)
5720 LOCATE 20,47:PRINT USING "#######";INT(CONCI)
5730 LOCATE 22,47:PRINT USING "#######";INT(MGCI)
5740 LOCATE 6,60:PRINT USING "#######";INT(SCIF)
5750 LOCATE 8,60:PRINT USING "#######";INT(PACIF)
5760 LOCATE 10,60:PRINT USING "#######";INT(SACIF)
5770 LOCATE 12,60:PRINT USING "#######";INT(SDCIF)
5780 LOCATE 14,60:PRINT USING "#######";INT(SSCIF)
5790 LOCATE 16,60:PRINT USING "#######";INT(RECIF)
5800 LOCATE 18,60:PRINT USING "#######";INT(FACIF)
5810 LOCATE 20,60:PRINT USING "#######";INT(CONCIF)
5820 LOCATE 22,60:PRINT USING "#######";INT(MGCIF)
5830 LOCATE 6,72:PRINT USING "#######";INT(SCCT)
5840 LOCATE 8,72:PRINT USING "#######";INT(PACT)
5850 LOCATE 10,72:PRINT USING "#######";INT(SACT)
5860 LOCATE 12,72:PRINT USING "#######";INT(SDCT)
5870 LOCATE 14,72:PRINT USING "#######";INT(SSCT)
5880 LOCATE 16,72:PRINT USING "#######";INT(RECT)
5890 LOCATE 18,72:PRINT USING "#######";INT(FACT)
```

```
5900 LOCATE 20,72:PRINT USING "#######";INT(CONCT)
5910 LOCATE 22,72:PRINT USING "#######";INT(MGCT)
5920 LOCATE 25,25:PRINT "PRESS ANY KEY TO CONTINUE"
5930 A$=INKEY$:IF A$="" THEN GOTO 5930
5940 CLS:LOCATE 2,35
5950 PRINT "SUMMARY DATA":LOCATE 4,25
5960 PRINT "HOURS        COST        INFLA        FRINGE        TOTAL"
5970 LOCATE 6,1:PRINT "PRE-AWD SVY" :LOCATE 8,1:PRINT "SPO TOTALS"
5980 LOCATE 10,1:PRINT "SECURITY":LOCATE 12,1:PRINT "EEO SUPPORT"
5990 LOCATE 14,1:PRINT "SOC-ECON CST":LOCATE 16,1:PRINT "WARANTEE CST"
6000 LOCATE 18,1:PRINT "TERMIN CST":LOCATE 20,1:PRINT "NEW EQUIP"
6010 LOCATE 22,1:PRINT "FAC MOD CST"
6020 LOCATE 6,24:PRINT USING "#######";INT(PRH)
6030 LOCATE 6,35:PRINT USING "#######";INT(PRC)
6040 LOCATE 8,24:PRINT USING "#######";INT(HRT)
6050 LOCATE 8,35:PRINT USING "#######";INT(SPOC)
6060 LOCATE 10,35:PRINT USING "#######";INT(SEC)
6070 LOCATE 12,35:PRINT USING "#######";INT(EEOC)
6080 LOCATE 14,35:PRINT USING "#######";INT(SOCEC)
6090 LOCATE 16,35:PRINT USING "#######";INT(WARC)
6100 LOCATE 18,35:PRINT USING "#######";INT(TERMC)
6110 LOCATE 20,35:PRINT USING "#######";INT(ETC)
6120 LOCATE 22,35:PRINT USING "#######";INT(FMODC)
6130 LOCATE 6,47:PRINT USING "#######";INT(PRCI)
  40 LOCATE 8,47:PRINT USING "#######";INT(SPOCI)
6150 LOCATE 6,60:PRINT USING "#######";INT(PRCIF)
6160 LOCATE 8,60:PRINT USING "#######";INT(SPOCIF)
6170 LOCATE 6,72:PRINT USING "#######";INT(TOTIF)
6180 LOCATE 8,72:PRINT USING "#######";INT(TOTTT)
6190 LOCATE 10,72:PRINT USING "#######";INT(SEC)
6200 LOCATE 12,72:PRINT USING "#######";INT(EEOC)
6210 LOCATE 14,72:PRINT USING "#######";INT(SOCEC)
6220 LOCATE 16,72:PRINT USING "#######";INT(WARC)
6250 LOCATE 18,72:PRINT USING "#######";INT(TERMC)
6260 LOCATE 20,72:PRINT USING "#######";INT(ETC)
6270 LOCATE 22,72:PRINT USING "#######";INT(FMODC)
6280 LOCATE 25,25:PRINT "PRESS ANY KEY TO CONTINUE"
6290 A$=INKEY$:IF A$="" THEN GOTO 6290
6300 CLS:LOCATE 2,35
6310 PRINT "SUMMARY DATA":LOCATE 4,25
6320 PRINT "              COST        INFLA        FRINGE        TOTAL"
6330 LOCATE 6,1:PRINT "ADMIN & AUD" :LOCATE 8,1:PRINT "TRANSPORTATION"
6340 LOCATE 10,1:PRINT "SOLICITATION":LOCATE 12,1:PRINT "TOTAL CBO COST"
6350 LOCATE 14,1:PRINT "SAVINGS":LOCATE 16,1:PRINT "LOST OP  COST"
6360 LOCATE 18,1:PRINT "THEO SAVINGS"
6370 LOCATE 6,35:PRINT USING "#######";INT(ADAC)
6380 LOCATE 6,72:PRINT USING "#######";INT(ADAC)
6390 LOCATE 8,35:PRINT USING "#######";INT(TRANC)
```

```
 00 LOCATE 8,72:PRINT USING "######";INT(TRANC)
6410 LOCATE 10,35:PRINT USING "######";INT(SOLC)
6420 LOCATE 10,72:PRINT USING "######";INT(SOLC)
6430 LOCATE 12,35:PRINT USING "######";INT(TCBOC)
6440 LOCATE 12,72:PRINT USING "######";INT(TCBFC)
6450 LOCATE 14,35:PRINT USING "######";INT(SAVEC)
6460 LOCATE 14,72:PRINT USING "######";INT(SAVEF)
6470 LOCATE 16,35:PRINT USING "######";INT(CBFC)
6480 LOCATE 16,72:PRINT USING "######";INT(CBFC)
6490 LOCATE 18,35:PRINT USING "######";INT(THEOC)
6500 LOCATE 18,72:PRINT USING "######";INT(THEOF)
6510 LOCATE 25,25:PRINT "PRESS ANY KEY TO CONTINUE"
6520 A$=INKEY$:IF A$="" THEN GOTO 6520 ELSE GOTO 6530
6530 GOTO 6820
6540 REM  THIS IS THE MODEL RESULTS SECTION
6550 CLS
6560 REM
6570 LOCATE 10,10
6580 PRINT "*************************************************************************"
6590 LOCATE 11,10
6600 PRINT "*                                                                       *"
6610 LOCATE 12,10
6620 PRINT "*    DO YOU WISH TO VIEW THE RESULTS ON SCREEN OR PRINTER?              *"
6630 LOCATE 13,10
6640 PRINT "*                                                                       *"
 50 LOCATE 14,10
6660 PRINT "*                        SELECT SCREEN (S) OR PRINTER (P)               *"
6670 LOCATE 15,10
6680 PRINT "*************************************************************************"
6690 LOCATE 14,66:PRINT "> "
6700 G$=INKEY$:IF G$="" THEN GOTO 6700 ELSE GOTO 6710
6710 IF G$="S" THEN GOTO 6730 ELSE GOTO 6720
6720 IF G$="P" THEN GOTO 6740 ELSE GOTO 6690
6730 GOSUB 6760:GOTO 6820
6740 GOSUB 6790:GOTO 6990
6750 REM THIS IS THE MODEL RESULTS ON THE SCREEN
6760 CLS
6770 GOTO 5390
6780 RETURN
6790 GOTO 7180
6800 REM THIS IS THE PRINTER OUTPUT OF THE MODEL RESULTS SECTION
6810 RETURN
6820 CLS
6830 REM
6840 LOCATE 10,10
6850 PRINT "*************************************************************************"
6860 LOCATE 11,10
6870 PRINT "*                                                                       *"
6880 LOCATE 12,10
6990 PRINT "*      DO YOU WISH TO VIEW THE RESULTS ON THE PRINTER? (Y/N)            *"
```

```
6900 LOCATE 13,10
6910 PRINT "*
6920 LOCATE 14,10                                                              *"
6930 PRINT "*******************************************************************************"
6940 LOCATE 12,70:PRINT "> "
6950 H$=INKEY$:IF H$="" THEN GOTO 6950 ELSE GOTO 6960
6960 IF H$="Y" THEN GOTO 6980 ELSE GOTO 6970
6970 IF H$="N" THEN GOTO 7480 ELSE GOTO 6940
6980 GOSUB 6790:GOTO 7480
6990 REM
7000 CLS
7010 LOCATE 10,10
7020 PRINT "*******************************************************************************"
7030 LOCATE 11,10
7040 PRINT "*
7050 LOCATE 12,10                                                              *"
7060 PRINT "*      DO YOU WISH TO VIEW THE RESULTS ON THE SCREEN? (Y/N)       *"
7070 LOCATE 13,10
7080 PRINT "*******************************************************************************"
7090 LOCATE 12,69:PRINT "> "
7100 P$=INKEY$:IF P$="" THEN GOTO 7100 ELSE GOTO 7110
7110 IF P$="Y" THEN GOTO 7130 ELSE GOTO 7120
7120 IF P$="N" THEN GOTO 7480 ELSE GOTO 7090
7130 GOSUB 6760:GOTO 7480
7140 END
7150 REM     ***************************************************************
7160 REM                          MODEL RESULTS TO PRINTER
7170 REM     ***************************************************************
7180 LPRINT "*******************************************************************************
**":LPRINT: LPRINT NAMNO$"                                  SUMMARY OF RESULTS                "DA
TE$:LPRINT
7190 LPRINT "                              HOURS      COST       INFLA      FRINGE     TOTAL"
7200 LPRINT
7210 LPRINT "SCREENING" TAB(20) INT(SH) TAB(30) INT(SCC) TAB(40) INT(SCI) TAB(5(
) INT(SCIF) TAB(60) INT(SCCT):LPRINT
7220 LPRINT "PRICE ANAL" TAB(20) INT(PAH) TAB(30) INT(PAC) TAB(40) INT(PACI) TAI
(50) INT(PACIF) TAB(60) INT(PACT):LPRINT
7230 LPRINT "SOURCE APP" TAB(20) INT(SAH) TAB(30) INT(SAC) TAB(40) INT(SACI) TAI
(50) INT(SACIF) TAB(60) INT(SACT):LPRINT
7240 LPRINT "SOURCE DEV" TAB(20) INT(SDH) TAB(30) INT(SDC) TAB(40) INT(SDCI) TAI
(50) INT(SDCIF) TAB(60) INT(SDCT):LPRINT
7250 LPRINT "SOURCE SEL" TAB(20) INT(SSH) TAB(30) INT(SSC) TAB(40) INT(SSCI) TAI
(50) INT(SSCIF) TAB(60) INT(SSCT):LPRINT
7260 LPRINT "REVERSE ENG" TAB(20) INT(REH) TAB(30) INT(REC) TAB(40) INT(RECI) TA
B(50) INT(RECIF) TAB(60) INT(RECT):LPRINT
7270 LPRINT "FIRST ARTIC" TAB(20) INT(FAH) TAB(30) INT(FAC) TAB(40) INT(FACI) TA
B(50) INT(FACIF) TAB(60) INT(FACT):LPRINT
7280 LPRINT "CONTRACTING" TAB(20) INT(CONH) TAB(30) INT(CONC) TAB(40) INT(CONCI)
 ;B(50) INT(CONCIF) TAB(60) INT(CONCT):LPRINT
7290 LPRINT "GENERAL SPO" TAB(20) INT(MGH) TAB(30) INT(MGC) TAB(40) INT(MGCI) TA
B(50) INT(MGCIF) TAB(60) INT(MGCT):LPRINT
```

```
7300 LPRINT "PRE-AWD SVY" TAB(20) INT(PRH) TAB(30) INT(PRC) TAB(40) INT(PRCI) TA
3(50) INT(PRCIF) TAB(60) INT(PRCT):LPRINT
7310 LPRINT "SPO TOTALS" TAB(20) INT(TOTH) TAB(30) INT(TOTC) TAB(40) INT(TOTI) T
AB(50) INT(TOTIF) TAB(60) INT(TOTTT):LPRINT
7320 LPRINT "SECURITY  " TAB(30) INT(SEC) TAB(60) INT(SEC):LPRINT
7330 LPRINT "EEO SUPPORT" TAB(30) INT(EEOC) TAB(60) INT(EEOC):LPRINT
7340 LPRINT "SOC-ECON CST" TAB(30) INT(SOCEC) TAB(60) INT(SOCEC):LPRINT
7350 LPRINT "WARANTEE CST" TAB(30) INT(WARC) TAB(60) INT(WARC):LPRINT
7360 LPRINT "TERMIN CST " TAB(30) INT(TERMC) TAB(60) INT(TERMC):LPRINT
7370 LPRINT "NEW EQUIP  " TAB(30) INT(ETC) TAB(60) INT(ETC):LPRINT
7380 LPRINT "FAC MOD CST" TAB(30) INT(FMODC) TAB(60) INT(FMODC):LPRINT
7390 LPRINT "ADMIN & AUD" TAB(30) INT(ADAC) TAB(60) INT(ADAC):LPRINT
7400 LPRINT "TRANSPORTATION" TAB(30) INT(TRANC) TAB(60) INT(TRANC):LPRINT
7410 LPRINT "SOLICITATION" TAB(30) INT(SOLC) TAB(60) INT(SOLC):LPRINT
7420 LPRINT "TOTAL CBO COST" TAB(30) INT(TCBOC) TAB(60) INT(TCBFC):LPRINT
7430 LPRINT "SAVINGS    " TAB(30) INT(SAVEC) TAB(60) INT(SAVEF):LPRINT
7440 LPRINT "LOST OPT COST" TAB(30) INT(CBFC) TAB(60) INT(CBFC):LPRINT
7450 LPRINT "THEO SAVINGS" TAB(30) INT(THEOC) TAB(60) INT(THEOF):LPRINT
7460 LPRINT "*****************************************************************'

7470 GOTO 6800
7480 REM     ***************************************************
7490 REM                    MODELS MENU SELECTION
   0 REM     ***************************************************
5 0 CLS
520 REM
530 LOCATE 6,10
540 PRINT "*****************************************************************"
550 LOCATE 7,10
560 PRINT "*                                                               *"
570 LOCATE 8,10
580 PRINT "*        PRESS H IF YOU WISH TO GO TO THE HELP MENU...          *"
590 LOCATE 9,10
600 PRINT "*                                                               *"
610 LOCATE 10,10
620 PRINT "*        PRESS E IF YOU WISH TO ENTER NEW DATA....              *"
630 LOCATE 11,10
640 PRINT "*                                                               *"
650 LOCATE 12,10
660 PRINT "*        PRESS C IF YOU WISH TO DO ANOTHER CALCULATION...       *"
670 LOCATE 13,10
680 PRINT "*                                                               *"
690 LOCATE 14,10
```

```
7700 PRINT "*          PRESS V IF YOU WISH TO VIEW INPUT DATA....                *"
7710 LOCATE 15,10
7720 PRINT "*
7730 LOCATE 16,10
7740 PRINT "*          PRESS S IF YOU WISH TO STOP.....
7750 LOCATE 17,10
7760 PRINT "*
7770 LOCATE 18,10
7780 PRINT "*************************************************************************"
7790 LOCATE 16,66:PRINT "> "
7800 B$=INKEY$:IF B$="" THEN GOTO 7800 ELSE GOTO 7810
7810 IF B$="H" THEN GOTO 7860 ELSE GOTO 7820
7820 IF B$="E" THEN GOTO 7880 ELSE GOTO 7830
7830 IF B$="C" THEN GOTO 7900 ELSE GOTO 7840
7840 IF B$="V" THEN GOTO 7920 ELSE GOTO 7850
7850 IF B$="S" THEN GOTO 7940 ELSE GOTO 7480
7860 CLS:LOCATE 15,25:PRINT "THE HELP PROGRAM IS LOADING."
7870 RUN  "BEGINY"
7880 CLS:LOCATE 15,25:PRINT "THE DATA ENTRY PROGRAM IS LOADING."
7890 RUN  "ENTERY"
7900 CLS
7910 GOTO 50
7920 CLS:LOCATE 15,25:PRINT "THE VIEW INPUT  PROGRAM IS LOADING."
7930 RUN  "DATINY"
7940 STOP
7950 END
```

A. COMPUTER PROGRAMS

A.4 DATINN

```
10 REM  THIS IS THE INPUT DATA PROGRAM FOR THE PRINTER
20 REM
30 REM ..............DATINN.BAS...................
40  DIM A1(9),A2(9),A3(9),A4(9),A5(9),A6(9),A7(9),A8(9)
50  DIM A1T$(9),A2T$(9),A3T$(9),A4T$(9),A5T$(9),A6T$(9),A7T$(9),A8T$(9)
60 CLS:LOCATE 10,10
70 PRINT "*****************************************************************"
80 LOCATE 11,10
90 PRINT "*                                                               *"
100 LOCATE 12,10
110 PRINT "*                  SELECT SCREEN (S) OR PRINTER (P)             *"
120 LOCATE 13,10
130 PRINT "*                                                               *"
140 LOCATE 14,10
150 PRINT "*                        FOR INPUT DATA                         *"
160 LOCATE 15,10
170 PRINT "*                                                               *"
180 LOCATE 16,10
190 PRINT "*                  SELECT (C) TO BEGIN CALCULATIONS             *"
200 LOCATE 17,10
210 PRINT "*                                                               *"
220 LOCATE 18,10
230 PRINT "*****************************************************************"
240 F$=INKEY$:IF F$="" THEN GOTO 240 ELSE GOTO 250
250 IF F$="S" GOTO 290
260 IF F$="P" GOTO 1930
270 IF F$="C" GOTO 2930
280 GOTO 60
290 CLOSE #1
300 REM
310 REM
320 KEY OFF
330 CLS
340 LOCATE 3,10
350 PRINT "*****************************************************************"
360 LOCATE 4,10
370 PRINT "*                                                               *"
380 LOCATE 5,10
390 PRINT "*            THE FOLLOWING FILES ARE AVAILABLE                  *"
400 LOCATE 6,10
410 PRINT "*                                                               *"
420 LOCATE 7,10
430 PRINT "*****************************************************************"
440 LOCATE 9,5:FILES "*.DAT"
450 LOCATE 18,15:PRINT "NOTE:  ENTER A 4 LETTERS FOLLOWED BY 1 NUMBER"
460 LOCATE 25,15:PRINT "                                                  "
470 LOCATE 19,22:PRINT "FOLLOWED BY .DAT (PLUS CARRIAGE RETURN)"
480 LOCATE 21,20:PRINT "EXAMPLES: PROD4.DAT   EXAM8.DAT   TEST5.DAT"
490 LOCATE 15,59:COLOR 0,7:PRINT"          ":COLOR 7,0
```

```
500 LOCATE 15,5:BEEP
510 INPUT "WHAT PROGRAM DO YOU WISH TO RUN (PROGRAM NAME/NUMBER)";NAMNO$
520 GOSUB 1840
530 REM  THIS IS THE BEGINNING OF THE QUESTIONING ..............................
540 CLS
550 LOCATE 2,30:PRINT "PROGRAM....."NAMNO$
560 LOCATE 4,10
570 PRINT "1. HOW MANY AF PERSONNEL CONDUCTED SCREENING?....."A1$(1)
580 LOCATE 5,10
590 PRINT "2. WHAT IS THEIR AVERAGE GS GRADE?....."A2$(2)
600 LOCATE 6,10
610 PRINT "3. HOW MANY WEEKS DID THE SCREENING REQUIRE?....."A3$(1)
620 LOCATE 7,10
630 PRINT "4. SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?....."A4$(1)
640 LOCATE 8,10
650 PRINT "5. WHAT WAS THE PRIME'S PRICE FOR CBO ITEMS?....."A5$(1)
660 LOCATE 9,10
670 PRINT "6. WHAT IS THE NEW CONTRACTOR'S PRICE FOR THESE ITEMS?..."A6$(1)
680 LOCATE 10,10
690 PRINT "7. WHAT IS THE INFLATION RATE (SEE HELP SCREEN)?....."A7$(1)
( ) LOCATE 11,10
710 PRINT "8. WHAT IS THE FRINGE BENEFIT RATE (SEE HELP SCREEN)?...."A8$(1)
720 LOCATE 13,10
730 PRINT "1. WILL YOU CONDUCT A PRICE ANALYSIS (Y/N)?....."A1$(2)
740 LOCATE 14,10
750 PRINT "2. WILL THIS BE A LEVEL I ANALYSIS (Y/N)?....."A2$(2)
760 LOCATE 15,10
770 PRINT "3. WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS ?....."A3$(2)
780 LOCATE 16,10
790 PRINT "4. HOW MANY SOURCE APPROVALS WILL BE REQUIRED ?....."A3$(2)
800 LOCATE 17,10
810 PRINT "5. HOW MANY PLANT VISITS FOR THIS SOURCE APP.?....."A4$(2)
820 LOCATE 18,10
830 PRINT "6. HOW MANY AF PERSONNEL WILL MAKE THESE VISITS?....."A6$(2)
840 LOCATE 19,10
850 PRINT "7. WHAT IS THE AVERAGE GRADE OF THESE VISITORS?....."A7$(2)
860 LOCATE 20,10
870 PRINT "8. IS THIS A SOLE SOURCE PROCUREMENT? (Y/N)....."A8$(2)
880 LOCATE 24,25:PRINT "PRESS ANY KEY TO CONTINUE"
890 A$=INKEY$:IF A$=""THEN GOTO 890 ELSE GOTO 900
```

```
  0 CLS
910 LOCATE 2,30:PRINT "PROGRAM....."NAMNO$
920 LOCATE 4,10
930 PRINT "1. WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N)....."A1$(3)
940 LOCATE 5,10
950 PRINT "2. WILL IT BE A LEVEL I EFFORT? (Y/N)....."A2$(3)
960 LOCATE 6,10
970 PRINT "3. THE AVERAGE GRADE OF THESE ENGINEERS WILL BE ....."A3$(3)
980 LOCATE 7,10
990 PRINT "4. WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N)....."A4$(3)
1000 LOCATE 8,10
1010 PRINT "5. WILL THIS SURVEY REQUIRE ON-SITE VISITS? (Y/N)....."A5$(3)
1020 LOCATE 9,10
1030 PRINT "6. HOW MANY VISITS WILL BE REQUIRED?....."A6$(3)
1040 LOCATE 10,10
1050 PRINT "7. HOW MANY PERSONNEL ON THE AF VISIT TEAM?....."A7$(3)
1060 LOCATE 11,10
1070 PRINT "8. WHAT IS THE AVERAGE GS GRADE OF THIS TEAM?....."A8$(3)
1080 LOCATE 13,10
1090 PRINT "1. IS THIS ANALYSIS FOR MORE THAN ONE ITEM? (Y/N)....."A1$(4)
1100 LOCATE 14,10
1110 PRINT "2. HOW MANY CLASS 1 (8.5 BY 11) DRAWINGS IN THE PACKAGE?."A2$(4)
1120 LOCATE 15,10
1130 PRINT "3. WHAT IS THE WEIGHT OF THE ITEM(S)?....."A3$(4)
1140 LOCATE 16,10
 150 PRINT "4. WHAT IS THE TOTAL SPO BUDGET?....."A4$(4)
1160 LOCATE 17,10
1170 PRINT "5. WHO MANY MONTHS ARE AVAILABLE TO SPND THIS BUDGET?...."A5$(4)
1180 LOCATE 18,10
1190 PRINT "6. WILL THERE BE A FIRST ARTICLE QUALIFICATION? (Y/N)?..."A6$(4)
1200 LOCATE 19,10
1210 PRINT "7. HOW MANY AF PERS WILL BE INVOLVED IN THIS QUAL?......."A7$(4)
1220 LOCATE 20,10
1230 PRINT "8. WHAT WILL BE THE GS GRADE OF THIS TEAM?....."A8$(4)
1240 LOCATE 24,25:PRINT "PRESS ANY KEY TO CONTINUE"
1250 A$=INKEY$:IF A$=""THEN GOTO 1250 ELSE GOTO 1260
1260 CLS
1270 LOCATE 2,30:PRINT "PROGRAM....."NAMNO$
1280 LOCATE 4,10
1290 PRINT "1. WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)...."A1$(5)
1300 LOCATE 5,10
1310 PRINT "2. WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N)....."A2$(5)
1320 LOCATE 6,10
1330 PRINT "3. WHAT WILL WARRANTEES COST?....."A3$(5)
1340 LOCATE 7,10
1350 PRINT "4. WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF ?."A4$(5)
1360 LOCATE 8,10
1370 PRINT "5. HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME?....."A5$(5)
1380 LOCATE 9,10
1390 PRINT "6. HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?....."A6$(5)
```

```
1400 LOCATE 10,10
1410 PRINT "7. WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?....."A7$(5)
1420 LOCATE 11,10
1430 PRINT "8. WHAT IS THE COST OF FACILITY MODIFICATIONS?....."A8$(5)
1440 LOCATE 13,10
1450 PRINT "1. WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?....."A1$(6)
1460 LOCATE 14,10
1470 PRINT "2. HOW MANY SOURCES WILL BE DEVELOPED?....."A2$(6)
1480 LOCATE 15,10
1490 PRINT "3. HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?....."A3$(6)
1500 LOCATE 16,10
1510 PRINT "4. HOW MANY AF VISITORS ON EACH TRIP?....."A4$(6)
1520 LOCATE 17,10
1530 PRINT "5. WHAT WILL BE THEIR AVERAGE GRADE?....."A5$(6)
1540 LOCATE 18,10
1550 PRINT "6. HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?.."A6$(6)
1560 LOCATE 19,10
1570 PRINT "7. WHAT IS THE HIGHEST CLASSIFICATION OF CBO ITEMS?....."A7$(6)
1580 LOCATE 20,10
1590 PRINT "8. THE NO OF NEW CONTR PERS REQUIRING CLEARANCES IS....."A8$(6)
1600 LOCATE 24,25:PRINT "PRESS ANY KEY TO CONTINUE"
1610 A$=INKEY$:IF A$=""THEN GOTO 1610 ELSE GOTO 1620
1620 CLS
1630 LOCATE 2,30:PRINT "PROGRAM....."NAMNO$
1640 LOCATE 4,10
1650 PRINT "1. HOW MANY PROPOSALS IN SOURCE SELECTION?....."A1$(7)
1660 LOCATE 5,10
1670 PRINT "2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?....."A2$(7)
1680 LOCATE 6,10
1690 PRINT "3. WHAT IS THEIR AVERAGE GRADE?....."A3$(7)
1700 LOCATE 7,10
1710 PRINT "4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS....."A4$(7)
1720 LOCATE 8,10
1730 PRINT "5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS....."A5$(7)
1740 LOCATE 9,10
1750 PRINT "6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS....."A6$(7)
1760 LOCATE 10,10
1770 PRINT "7. HOW MANY SOLICITATIONS WILL BE SENT OUT?....."A7$(7)
1780 LOCATE 11,10
1790 PRINT "8. WHAT IS THE AVERAGE NO. OF PERSONNEL IN THE SPO?....."A8$(7)
1800 LOCATE 24,25:PRINT "PRESS ANY KEY TO CONTINUE"
1810 A$=INKEY$:IF A$=""THEN GOTO 1810 ELSE GOTO 1820
1820 CLS
1830 GOTO 1910
1840 REM THIS SUBROUTINE ENTERS PREVIOUS DATA INTO THE MODEL
1850 OPEN NAMNO$ FOR INPUT AS #1
1860 FOR I = 1 TO 7
1870 INPUT #1,A1$(I),A2$(I),A3$(I),A4$(I),A5$(I),A6$(I),A7$(I),A8$(I)
1880 NEXT
1890 CLOSE #1
```

```
1900 RETURN
1910 CLOSE #1
1920 GOTO 60
1930 REM
1940 REM
1950 CLOSE #1
1960 REM
1970 KEY OFF
1980 CLS
1990 LOCATE 3,10
2000 PRINT "*****************************************************************"
2010 LOCATE 4,10
2020 PRINT "*                                                               *"
2030 LOCATE 5,10
2040 PRINT "*              THE FOLLOWING FILES ARE AVAILABLE                *"
2050 LOCATE 6,10
2060 PRINT "*                                                               *"
2070 LOCATE 7,10
2080 PRINT "*****************************************************************"
2090 LOCATE 9,5:FILES "*.DAT"
2100 LOCATE 18,15:PRINT "NOTE:  ENTER A 4 LETTERS FOLLOWED BY 1 NUMBER"
2110 LOCATE 25,15:PRINT "                                                    "
2120 LOCATE 19,22:PRINT "FOLLOWED BY .DAT (PLUS CARRIAGE RETURN)"
2130 LOCATE 21,20:PRINT "EXAMPLES: PROD4.DAT   EXAM8.DAT   TEST5.DAT"
2140 LOCATE 15,59:COLOR 0,7:PRINT"          ":COLOR 7,0
2150 LOCATE 15,5:BEEP
2160 INPUT "WHAT PROGRAM DO YOU WISH TO RUN (PROGRAM NAME/NUMBER)";NAMNO$
2170 GOSUB 2840
2180 REM  THIS IS THE BEGINNING OF THE QUESTIONING .....

2190 CLS
2200 LPRINT DATE$"..............................."NAMNO$:LPRINT
2210 LPRINT "1. HOW MANY AF PERSONNEL CONDUCTED SCREENING?....."A1$(1)
2220 LPRINT "2. WHAT IS THEIR AVERAGE GS GRADE?................"A2$(1)
2230 LPRINT "3. HOW MANY WEEKS DID THE SCREENING REQUIRE?......."A3$(1)
2240 LPRINT "4. SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?.."A4$(1)
2250 LPRINT "5. WHAT WAS THE PRIME'S PRICE FOR CBO ITEMS?......."A5$(1)
2260 LPRINT "6. WHAT IS THE NEW CONTRACTOR'S PRICE FOR THE ITEMS?....."A6$(1)
2270 LPRINT "7. WHAT IS THE INFLATION RATE (SEE HELP SCREEN)?....."A7$(1)
2280 LPRINT "8. WHAT IS THE FRINGE BENEFIT RATE (SEE HELP SCREEN)?...."A8$(1)
2290 LPRINT
2300 LPRINT "1. WILL YOU CONDUCT A PRICE ANALYSIS (Y/N)?......."A1$(2)
2310 LPRINT "2. WILL THIS BE A LEVEL I ANALYSIS (Y/N)?........."A2$(2)
2320 LPRINT "3. WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS ?....."A3$(2)
2330 LPRINT "4. HOW MANY SOURCE APPROVALS WILL BE REQUIRED ?....."A4$(2)
2340 LPRINT "5. HOW MANY PLANT VISITS FOR THIS SOURCE APP.?....."A5$(2)
2350 LPRINT "6. HOW MANY AF PERSONNEL WILL MAKE THESE VISITS?....."A6$(2)
2360 LPRINT "7. WHAT IS THE AVERAGE GRADE OF THESE VISITORS?....."A7$(2)
2370 LPRINT "8. IS THIS A SOLE SOURCE PROCUREMENT? (Y/N)......."A8$(2)
2380 LPRINT
2390 LPRINT "1. WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N)....."A1$(3)
```

```
2400 LPRINT "2. WILL IT BE A LEVEL 1 EFFORT? (Y/N)....."A2$(3)
2410 LPRINT "3. THE AVERAGE GRADE OF THESE ENGINEERS WILL BE ....."A3$(3)
2420 LPRINT "4. WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N)....."A4$(3)
2430 LPRINT "5. WILL THIS SURVEY REQUIRE ON-SITE VISITS? (Y/N)....."A5$(3)
2440 LPRINT "6. HOW MANY VISITS WILL BE REQUIRED?....."A6$(3)
2450 LPRINT "7. HOW MANY PERSONNEL ON THE AF VISIT TEAM?....."A7$(3)
2460 LPRINT "8. WHAT IS THE AVERAGE GS GRADE OF THIS TEAM?....."A8$(3)
2470 LPRINT
2480 LPRINT "1. IS THIS ANALYSIS FOR MORE THAN ONE ITEM? (Y/N)....."A1$(4)
2490 LPRINT "2. HOW MANY CLASS 1 (8.5 BY 11) DRAWINGS IN THE PACKAGE?."A2$(4)
2500 LPRINT "3. WHAT IS THE WEIGHT OF THE ITEM(S)?....."A3$(4)
2510 LPRINT "4. WHAT IS THE TOTAL SPO BUDGET?....."A4$(4)
2520 LPRINT "5. HOW MANY MONTHS ARE AVAILABLE TO SPEND THIS BUDGET?..."A5$(4)
2530 LPRINT "6. WILL THERE BE A FIRST ARTICLE QUALIFICATION? (Y/N)?..."A6$(4)
2540 LPRINT "7. HOW MANY AF PERS WILL BE INVOLVED IN THIS QUAL?....."A7$(4)
2550 LPRINT "8. WHAT WILL BE THE GS GRADE OF THIS TEAM?....."A8$(4)
2560 LPRINT
2570 LPRINT "1. WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)...."A1$(5)
2580 LPRINT "2. WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N)....."A2$(5)
2590 LPRINT "3. WHAT WILL WARRANTEES COST?....."A3$(5)
2600 LPRINT "4. WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF ?."A4$(5)
2610 LPRINT "5. HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME?....."A5$(5)
2620 LPRINT "6. HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?....."A6$(5)
2630 LPRINT "7. WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?....."A7$(5)
2640 LPRINT "8. WHAT IS THE COST OF FACILITY MODIFICATIONS?....."A8$(5)
2650 LPRINT
2660 LPRINT "1. WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?....."A1$(6)
2670 LPRINT "2. HOW MANY SOURCES WILL BE DEVELOPED?....."A2$(6)
2680 LPRINT "3. HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?....."A3$(6)
2690 LPRINT "4. HOW MANY AF VISITORS ON EACH TRIP?....."A4$(6)
2700 LPRINT "5. WHAT WILL BE THEIR AVERAGE GRADE?....."A5$(6)
2710 LPRINT "6. HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?.."A6$(6)
2720 LPRINT "7. WHAT IS THE HIGHEST CLASSIFICATION OF CBO ITEMS?....."A7$(6)
2730 LPRINT "8. THE NO OF NEW CONTR PERS REQUIRING CLEARANCES IS....."A8$(6)
2740 LPRINT
2750 LPRINT "1. HOW MANY PROPOSALS IN SOURCE SELECTION?....."A1$(7)
2760 LPRINT "2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?....."A2$(7)
2770 LPRINT "3. WHAT IS THEIR AVERAGE GRADE?....."A3$(7)
2780 LPRINT "4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS....."A4$(7)
2790 LPRINT "5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS....."A5$(7)
2800 LPRINT "6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS....."A6$(7)
2810 LPRINT "7. HOW MANY SOLICITATIONS WILL BE SENT OUT?....."A7$(7)
2820 LPRINT "8. WHAT IS THE AVE. NO. OF PERSONNEL IN THE SPO?....."A8$(7)
2830 GOTO 2910
2840 REM THIS SUBROUTINE ENTERS PREVIOUS DATA INTO THE MODEL
2850 OPEN NAMNO$ FOR INPUT AS #1
2860 FOR I = 1 TO 7
2870 INPUT #1,A1$(I),A2$(I),A3$(I),A4$(I),A5$(I),A6$(I),A7$(I),A8$(I)
2880 NEXT
2890 CLOSE #1
```

```
  700 RETURN
 2910 CLOSE #1
 2920 GOTO 60
 2930 CLM
 2940 CLS:LOCATE 15,25
 2950 PRINT "THE CALCULATIONS PROGRAM IS LOADING"
 2960 RUN  "CALCUY"
 2970 END
```

B. SCREEN DESIGNED QUESTIONS

QUESTION 1,SCREEN 1

HOW MANY AF PERSONNEL CONDUCTED SCREENING?

THIS IS THE NUMBER OF GOVERNMENT PERSONNEL THAT PARTICIPATED IN THE SCREENING OF THE POTENTIAL ITEMS FOR COMPONENT BREAKOUT. NORMALLY THIS GROUP WOULD INCLUDE ENGINEERS, PROGRAM MANAGERS, CONTRACTING PERSONNEL, AND OTHERS FROM THE SPO CADRE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 1

WHAT IS THEIR AVERAGE GRADE?

TO DETERMINE THIS FIGURE CALCULATE THE AVERAGE SCREENING TEAM GRADE BY ADDING THE GRADES OF THE PARTICIPANTS AND DIVIDE BY THE NUMBER OF PARTICIPANTS AND THEN SELECT THE NEAREST WHOLE NUMBER. THE PROGRAM WILL ACCEPT ANY WHOLE NUMBER FROM 7 TO 15.

2LT = GS9 1LT = GS11 CAPT = GS12

MAJ = GS13 LCOL = GS14 COL = GS15

>>>CAUTION<<< ENTER ONLY NUMBERS FROM 7 TO 15

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3, SCREEN 1

HOW MANY WEEKS DID THE SCREENING REQUIRE?

THIS IS THE TOTAL TIME IN WEEKS OF THE SCREENING FROM THE START TO THE FINISH.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 1

SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?

THIS IS AN ESTIMATE OF THE PERCENTAGE OF THE TIME DEVOTED TO SCREENING BY THE TEAM MEMBERS.

DATA ENTRY EXAMPLE.....FOR 30 PERCENT ENTER 30

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 1

WHAT WAS THE PRIME'S PRICE FOR THE CBO ITEMS?

THIS IS THE TOTAL OF THE PRIME PRICES OF THE CBO ITEMS IDENTIFIED BY THE SCREENING TEAM.

FOR EXAMPLE....ENTER 1000000 FOR ONE MILLION.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 1

WHAT IS THE NEW CONTRACTOR'S PRICE FOR THE ITEMS?

THIS IS THE ANTICIPATED OR KNOWN PRICE OF THE CBO ITEMS IDENTIFIED FOR THE BREAKOUT. INCLUDE ALL OF OF THE ITEMS IN THE QUANTITIES ORDERED.
THIS COST WILL BE COMPARED TO THE PRIME COST THAT WAS CALLED FOR ABOVE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 1

WHAT IS THE INFLATION RATE?

THIS IS THE RATE OF INFLATION SINCE JANUARY 1987.

EXAMPLE....IF THE INFLATION RATE IS 5 PERCENT THEN

.....ENTER 5

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 1

WHAT IS THE FRINGE BENEFIT RATE?

THIS IS THE RATE ADDED TO SALARY INFORMATION IN ORDER TO COMPUTE TOTAL COSTS OF PERSONNEL. THE ASD RATE IS CURRENTLY AT 27.3 PERCENT. UNLESS YOU HAVE NEWER INFORMATION THEN WE RECOMMEND THAT YOU ENTER 27.3 AS THE FRINGE BENEFIT RATE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 2

WILL YOU CONDUCT A PRICE ANALYSIS? (Y/N)

A PRICE ANALYSIS IS USED TO DEVELOP VALIDATED PRICES FOR ITEMS WHICH WILL BE PURCHASED IN A SOLE SOURCE MODE. THESE VALIDATED PRICES, OFTEN REFERRED TO AS VALUE BASED PRICES, ARE ATTEMPTS TO DEFINE WHAT THE ITEM 'SHOULD COST' IF IT WERE ACQUIRED UNDER COMPETITIVE CONDITIONS. REVIEWS MAY BE ACCOMPLISHED AS EITHER LEVEL I OR LEVEL II REVIEW.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 2

WILL THIS BE A LEVEL I ANALYSIS? (Y/N)

A LEVEL I ANALYSIS IS MORE OF A LIMITED REVIEW IN WHICH THE LAST PRICE PAID IS REVIEWED AGAINST THE EXISTING DOCUMENTATION TO DETERMINE IF THAT PRICE IS OUT OF LINE WITH THE VALUE OF THE ITEM. THESE LEVEL I REVIEWS ARE ACCOMPLISHED RELATIVELY QUICKLY.

A LEVEL II ANALYSIS IS MUCH MORE EXTENSIVE AND INCLUDES MATERIAL, PROCESS, AND LABOR ESTIMATES.

LEVEL I ANALYSIS USUALLY REQUIRES ABOUT 1 HOUR OF EFFORT AND A LEVEL II ABOUT 12.5 HOURS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3,SCREEN 2

WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS?

ADD THE GRADES OF THE ANALYSTS AND DIVIDE BY THE NUMBER OF ANALYSTS AND THEN SELECT THE NEAREST WHOLE NUMBER. THE MODEL ACCEPTS NUMBERS FROM 7 TO 15.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 2

HOW MANY SOURCE APPROVALS WILL BE REQUIRED?

THIS IS THE REVIEW OF POTENTIAL SOURCES BY REVIEWING THE DOCUMENTATION SUBMITTED BY THE POTENTIAL SOURCE INDEPENDENT OF ANY SPECIFIC REQUEST BY THE AIR FORCE.

THIS SOURCE APPROVAL USUALLY REQUIRES ABOUT 20 HOURS OF EFFORT BY THE GOVERNMENT.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 2

HOW MANY PLANT VISITS FOR THIS SOURCE APP.?

ENTER THE NUMBER OF PLANNED VISITS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 2

HOW MANY AF PERS WILL MAKE THESE VISITS?

ENTER THE AVERAGE NUMBER OF TRAVELERS OF EACH OF THE SOURCE APPROVAL VISITS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 2

WHAT IS THE AVERAGE GRADE OF THESE VISITORS?

ADD THE GRADES OF THE VISITORS AND DIVIDE BY
BY THE NUMBERS OF PERSONNEL AND THEN SELECT
THE NEAREST WHOLE NUMBER.
THE MODEL WILL ACCEPT 7 TO 15 AS ENTRIES.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 2

WILL THIS BE A SOLE SOURCE PROCUREMENT? (Y/N)

SELF EXPLAINATORY....SELECT Y OR N

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 3

WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N)

REVERSE ENGINEERING (RE) CAN RANGE FROM SIMPLE SUBSTITUTION OF GOVERNMENT/INDUSTRY SPECIFICATIONS WHEN CONTRACTOR SPECIFICATIONS ARE MISSING OR THE GOVERNMENT LACKS RIGHTS IN DATA FOR THE CONTRACTOR SPECIFICATIONS TO DEVELOPMENT OF A MAJOR PORTION OF THE ENGINEERING DOCUMENTATION NEEDED TO PRODUCE THE ITEM. TWO LEVELS OF RE EFFORT ARE AVAILABLE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 3

WILL IT BE A LEVEL I EFFORT ? (Y/N)

NORMALLY LEVEL I CAN BE ACCOMPLISHED BY REVIEW OF AVAILABLE DATA AND USE OF GENERAL ENGINEERING KNOWLEDGE. PHYSICAL MEASURING AND ANALYSIS OF THE PART IS NOT NECESSARY.

LEVEL II ANALYSIS IS MORE EXTENSIVE THAN LEVEL I AND INCLUDES MEASURING AND ANALYSIS OF THE PART.

LEVEL I EFFORT IS MEASURED AS 0.1 HOURS TIMES THE NUMBER OF CLASS 1 DRAWINGS. THE LEVEL II MULTIPLIER IS 4.0 HOURS PER CLASS 1 DRAWING.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3,SCREEN 3

THE AVERAGE GRADE OF THESE ENGINEERS WILL BE...

COMPUTE AS WITH OTHER AVERAGE GRADE USING THE GRADES OF THE ENGINEERS INVOLVED. REMEMBER THE MODEL WILL ACCEPT ONLY WHOLE NUMBERS FROM 7 TO 15.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 3

WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N)

WHEN A NEW SOURCE IS BEING CONSIDERED FOR AWARD, IT IS NECESSARY THAT THE GOVERNMENT MAKE AN ASSESSMENT OF THE RESPONSIBILITY AND RESPONSIVENESS OF THE OFFEROR. THE SURVEY MAY REQUIRE A VISIT TO THE OFFEROR'S FACILITY. RECENT ESTIMATES INDICATE THAT 1/3 OF NEW OFFERORS WILL REQUIRE A PAS AND THAT 40 PERCENT OF THESE WILL REQUIRE AN ON SITE VISIT. PAS WILL REQUIRE 5 HOURS PLUS 6 WHEN ON SITE REQUIRED.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 3

WILL THIS SURVEY REQUIRE ON SITE VISITS? (Y/N)

SELF EXPLAINATORY....SELECT Y OR N

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 3

HOW MANY VISITS WILL BE REQUIRED?

SELF EXPLAINATORY....ENTER NUMBER.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 3

HOW MANY PERSONNEL ON THE AF VISIT TEAM?

SELF EXPLAINATORY....ENTER NUMBER.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8, SCREEN 3

WHAT IS THE AVE. GS GRADE OF THIS TEAM?

ADD THE GRADES OF THE TEAM MEMBERS AND DIVIDE BY THE NUMBER OF TEAM MEMBERS AND THEN SELECT THE NEAREST WHOLE NUMBER. THE MODEL ACCEPTS WHOLE NUMBERS FROM 7 TO 15.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 4

IS THIS ANALYSIS FOR MORE THAN ONE ITEM? (Y/N)

SELF EXPLANATORY

ANSWER WITH Y FOR YES

N FOR NO

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 4

HOW MANY CLASS 1 (8.5 BY 11) DRAWINGS?

COUNT THE TOTAL NUMBER OF THESE CLASS 1, 8.5 INCHES BY 11 INCHES, DRAWINGS FOR ALL OF THE CBO ITEM(S).

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3,SCREEN 4

WHAT IS THE WEIGHT OF THE ITEM(S)?

ENTER THE TOTAL ITEM(S) WEIGHT IN POUNDS.

IF 57 POUNDS....ENTER 57

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 4

WHAT IS THE TOTAL SPO BUDGET?

ENTER THE TOTAL BUDGET FOR THE CURRENT LIFE OF THE SPO.

OF THE SPO.

EXAMPLE....IF THE TOTAL BUDGET IS 600 MILLION DOLLARS

.....THEN ENTER 600000000

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5, SCREEN 4

HOW MANY MONTHS ARE AVAILABLE TO SPEND THIS BUDGET?

ENTER THE TOTAL MONTHS ALLOCATED TO SPEND THE BUDGET IDENTIFIED IN THE QUESTION ABOVE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 4

WILL THERE BE A FIRST ARTICLE QUALIFICATION? (Y/N)

FIRST ARTICLES ARE USED AS A VEHICLE BY WHICH A CONTRACTOR DEMONSTRATES THE CAPABILITY TO MANUFACTURE A SPECIFIC ITEM OR ITEMS. TYPICALLY PRODUCTION WILL NOT START UNTIL THIS IS FINISHED.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 4

HOW MANY AF PERS WILL BE INVOLVED IN THIS QUAL?

ENTER THE TOTAL NUMBER OF AIR FORCE PERSONNEL THAT WILL BE INVOLVED IN THE FIRST ARTICLE QUALIFICATION.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 4

WHAT WILL BE THE AVE. GS GRADE FOR THIS TEAM?

AS IN PREVIOUS GRADE AVERAGES, DETERMINE THE AVERAGE TEAM MEMBER GRADE AND ENTER THE NEAREST WHOLE NUMBER.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 5

WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)

EEO REFERS TO EQUAL OPPORTUNITY PROGRAMS. TYPCALLY SMALL CONTRACTORS DO NOT HAVE ACTIVE EEO PROGRAMS AND THEREFORE IN ORDER TO COMPLY WITH CURRENT LAW WILL HAVE TO INITIATE THESE PROGRAMS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 5

WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N)

THESE INCLUDE SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, LABOR SURPLUS AREAS, OSHA, AND OTHER SOCIO-ECONOMIC PROGRAMS ESTABLISHED BY FAR SUBPART 19 PARAGRAPHS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3,SCREEN 5

WHAT WILL WARRANTEES COST?

IF THE NEW CONTRACT FOR THE CBO ITEM(S) REQUIRES WARRANTEES, THAN THESE COST SHOULD BE INCLUDED IN THE COST OF BREAKOUT. IF THIS COST IS NOT INCLUDED IN THE NEW CBO CONTRACTOR COST ENTERED EARLIER THEN ENTER THIS WARRANTEE COST HERE. IF THE WARRANTEE COST IS INCLUDED PREVIOUSLY ENTER 0 HERE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 5

WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF?

THE PRIME'S CONTRACT WILL UNDOUBTEDLY CONTAIN A PROVISION FOR EARLY OR PARTIAL TERMINATION OF ALL OR PARTS OF THE CONTRACT DATA ITEMS.

ENTER THIS COST.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 5

HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME?

ENTER THE ONE WAY MILEAGE FROM THE NEW CONTRACTOR'S FACILITY (WHERE THE CBO WILL BE ASSEMBLED) TO THE PRIME'S FACILITY (WHERE THE FINAL END ITEM WILL BE ASSEMBLED.)

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 5

HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?

THIS IS THE NUMBER OF TECHNICAL REVIEWS ASSOCIATED WITH THE CBO ITEM(S). THESE REVIEWS WOULD NOT BE HELD IF THE PRIMARY RESPONSIBILITY REMAINED WITH THE PRIME CONTRACTOR FOR THE CBO ITEM(S).

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 5

WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?

ENTER THE COST TO THE GOVERNMENT OF ANY NEW EQUIPMENT PURCHASED BY THE NEW CONTRACTOR THAT IS NOT INCLUDED IN THE PREVIOUSLY ENTERED CBO COST FROM THE NEW CONTRACTOR. IF PREVIOUSLY INCLUDED THEN ENTER 0, OTHERWISE ENTER THE COST.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 5

WHAT IS THE COST OF FACILITY MODIFICATIONS?

ENTER THE COST TO THE GOVERNMENT OF ANY FACILITY MODIFICATIONS AT THE NEW CONTRACTOR'S FACILITY THAT RESULTED FROM THE CBO ITEM(S).

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 6

WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?

THIS IS THE GROUP OF AF CONTRACTING PERSONNEL
THAT ARE RESPONSIBLE FOR THE CONTRACTING EFFORTS
ASSOCIATED WITH THE CBO ITEM(S). COMPUTE THE
AVERAGE GRADE AS NOTED IN PREVIOUS QUESTIONS.

DON'T FORGET....ONLY 7 TO 15 ARE ACCEPTABLE.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 6

HOW MANY SOURCES WILL BE DEVELOPED?

SOURCE DEVELOPMENT USUALLY INCLUDES ACTIONS TAKEN BY THE AIR FORCE TO VALIDATE THE CAPABILITY OF A SECOND SOURCE FOR A NONCOMPETITIVE ITEM OR A SINGLE SOURCE FOR AN ITEM WHICH HAS NO KNOWN SOURCES.

SOURCE DEVELOPMENT AVERAGES 120 HOURS OF GOVERNMENT EFFORT.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3,SCREEN 6

HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?

SELF-EXPLANATORY. ENTER THE NUMBER.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 6

HOW MANY AF VISITORS ON EACH TRIP?

THIS MAY VARY FROM TRIP TO TRIP SO USE AN AVERAGE.

INCLUDE BOTH MILITARY AND CIVILIAN AF PERSONNEL.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 6

WHAT WILL BE THEIR AVERAGE GRADE?

THIS IS THE AVERAGE GRADE OF THE VISITORS IN THE PREVIOUS QUESTION. THE MODEL WILL ACCEPT GRADES FROM 7 TO 15.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 6

HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?

THIS IS THE TOTAL OF EMPLOYEES AT ALL OF THE FACILITIES ENGAGED IN THE CBO ITEM(S).

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 6

WHAT IS THE HIGHEST CLASSIFICATION OF THE CBO ITEM(S)?

THE MODEL WILL ACCEPT UNCLAS FOR UNCLASSIFIED

CONF FOR CONFIDENTIAL

SEC FOR SECRET

TSEC FOR TOP SECRET

ENTER ONLY THESE VARIABLES.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 6

THE NUMBER OF NEW CONTR PERS REQUIRING CLEARANCES IS...?

ENTER THE NUMBER OF PERSONNEL AT THE NEW CONTRACTOR'S FACILITY THAT WILL REQUIRE CLEARANCES THAT THEY DO NOT CURRENTLY POSSES.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 1,SCREEN 7

HOW MANY PROPOSALS IN SOURCE SELECTION?

THIS IS THE KNOWN OR ANTICIPATED NUMBER OF PROPOSALS
THAT WILL HAVE TO BE EVALUATED BY THE SPO TEAM.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 2,SCREEN 7

HOW MAY AF PEOPLE IN THE SOURCE SELECTION?

THIS IS THE NUMBER OF PERSONNEL THAT WILL PARTICIPATE IN THE SOURCE SELECTION PROCESS.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 3, SCREEN 7

WHAT IS THEIR AVERAGE GRADE?

DETERMINE THE AVERAGE GRADE OF THE SOURCE SELECTION TEAM AND ENTER A WHOLE NUMBER FROM 7 TO 15.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 4,SCREEN 7

MONTHS OF SPO CBO MGT RESPONSIBILITY IS...?

THIS IS THE TOTAL TIME FROM BEGINNING SCREENING TO DELIVERY OF THE FINAL CBO ITEM TO THE PRIME. ENTER THE NUMBER OF MONTHS REQUIRED OF THIS ACTIVITY.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 5,SCREEN 7

AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS...?

THIS IS AN ESTIMATE OF THE TIME DEVOTED TO THE MANAGEMENT OF THE CBO ITEMS BY THE SPO. ENTER THE AVERAGE NUMBER OF HOURS DEVOTED TO THE MANAGEMENT OF THE CBO ITEMS BY SPO PERSONNEL.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 6,SCREEN 7

AVE. GRADE OF THE SPO CBO MANAGEMTN TEAM IS...?

THIS IS THE AVERAGE GRADE OF THE SPO TEAM RESPONSIBLE FOR THE MANAGEMENT OF THE CBO ITEMS FROM THE START OF SCREENING TO THE DELIVERY TO THE PRIME.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 7,SCREEN 7

HOW MANY SOLICITATION SETS WILL BE SENT OUT?

THE SOLICITATION OR BID SETS ARE THOSE PACKAGES THAT ARE PREPARED BY THE GOVERNMENT TO SOLICIT BIDS FROM POTENTIALLY INTERESTED VENDORS. THESE SETS DESCRIBE THE AIR FORCE REQUIREMENTS AND THE PROPOSED CONTRACTING APPROACH TO THE PROCUREMENT.

THESE SOLICITATION SETS GENERALLY COST $10.00 EACH. ENTER THE NUMBER OF BID SETS PRODUCED.

PRESS ANY KEY TO RETURN TO SCREEN.

QUESTION 8,SCREEN 7

WHAT IS THE AVE. NO. OF PERSONNEL IN THE SPO?

THIS IS THE NUMBER OF PERSONNEL IN THE SPO FROM ITS BEGINNING AS DETERMINED BY THE BEGINNING OF A BUDGET TO THE END OF THE CURRENT BUDGET. COMPUTE THE AVERAGE NUMBER OF SPO PERSONNEL DURING THIS PERIOD.

ENTER THIS NUMBER.

PRESS ANY KEY TO RETURN TO SCREEN.

C. TYPICAL PRINTOUTS

C.1 INPUT DATA

04-04-1987.....TEST1.DAT

1. HOW MANY AF PERSONNEL CONDUCTED SCREENING?.....13
2. WHAT IS THEIR AVERAGE GS GRADE?.....13
3. HOW MANY WEEKS DID THE SCREENING REQUIRE?.....13
4. SCREENING REQUIRED WHAT PERCENT OF THEIR TIME?.....13
5. WHAT WAS THE PRIME'S PRICE FOR CBO ITEMS?.....5000000
6. WHAT IS THE NEW CONTRACTOR'S PRICE FOR THE ITEMS?.....4000000
7. WHAT IS THE INFLATION RATE (SEE HELP SCREEN)?.....3
8. WHAT IS THE FRINGE BENEFIT RATE (SEE HELP SCREEN)?....27.3

1. WILL YOU CONDUCT A PRICE ANALYSIS (Y/N)?.....Y
2. WILL THIS BE A LEVEL I ANALYSIS (Y/N)?.....Y
3. WHAT WILL BE THE AVERAGE GRADE OF THE ANALYSTS ?.....12
4. HOW MANY SOURCE APPROVALS WILL BE REQUIRED ?.....4
5. HOW MANY PLANT VISITS FOR THIS SOURCE APP.?.....3
6. HOW MANY AF PERSONNEL WILL MAKE THESE VISITS?.....6
7. WHAT IS THE AVERAGE GRADE OF THESE VISITORS?.....12
8. IS THIS A SOLE SOURCE PROCUREMENT? (Y/N).....Y

1. WILL REVERSE ENGINEERING BE ATTEMPTED? (Y/N).....Y
2. WILL IT BE A LEVEL I EFFORT? (Y/N).....N
3. THE AVERAGE GRADE OF THESE ENGINEERS WILL BE 13
4. WILL A PRE-AWARD SURVEY BE CONDUCTED? (Y/N).....Y
5. WILL THIS SURVEY REQUIRE ON-SITE VISITS? (Y/N).....N
6. HOW MANY VISITS WILL BE REQUIRED?.....0
7. HOW MANY PERSONNEL ON THE AF VISIT TEAM?.....0
8. WHAT IS THE AVERAGE GS GRADE OF THIS TEAM?.....7

1. IS THIS ANALYSIS FOR MORE THAN ONE ITEM? (Y/N).....Y
2. HOW MANY CLASS 1 (8.5 BY 11) DRAWINGS IN THE PACKAGE?.55
3. WHAT IS THE WEIGHT OF THE ITEM(S)?.....14000
4. WHAT IS THE TOTAL SPO BUDGET?.....30000000
5. HOW MANY MONTHS ARE AVAILABLE TO SPEND THIS BUDGET?...24
6. WILL THERE BE A FIRST ARTICLE QUALIFICATION? (Y/N)?...N
7. HOW MANY AF PERS WILL BE INVOLVED IN THIS QUAL?.....0
8. WHAT WILL BE THE GS GRADE OF THIS TEAM?.....7

1. WILL THE NEW CONTRACTOR REQUIRE EEO SUPPORT? (Y/N)....N
2. WILL HE REQUIRE SOCIO-ECONOMIC SUPPORT? (Y/N).....Y
3. WHAT WILL WARRANTEES COST?.....50000
4. WHAT WILL BE THE PARTIAL TERMINATION COST TO THE AF ?.44444
5. HOW MANY MILES FROM THE NEW SOURCE TO THE PRIME?.....1200
6. HOW MANY TECHNICAL REVIEWS WILL BE REQUIRED?.....4
7. WHAT IS THE COST OF NEW EQUIPMENT/TOOLS?.....30000
8. WHAT IS THE COST OF FACILITY MODIFICATIONS?.....200000

. WHAT IS THE AVE. GRADE OF THE CONTRACTING TEAM?.....12
2. HOW MANY SOURCES WILL BE DEVELOPED?.....6
3. HOW MANY PLANT VISITS FOR SOURCE DEVELOPMENT?.....6
4. HOW MANY AF VISITORS ON EACH TRIP?.....6
5. WHAT WILL BE THEIR AVERAGE GRADE?.....12
6. HOW MANY EMPLOYEES AT THE NEW CONTRACTOR'S FACILITY?..600
7. WHAT IS THE HIGHEST CLASSIFICATION OF CBO ITEMS?.....SEC
8. THE NO OF NEW CONTR PERS REQUIRING CLEARANCES IS.....100

1. HOW MANY PROPOSALS IN SOURCE SELECTION?.....3
2. HOW MANY AF PEOPLE IN THE SOURCE SELECTION?.....44
3. WHAT IS THEIR AVERAGE GRADE?.....12
4. MONTHS OF SPO CBO MGT RESPONSIBILITY IS.....24
5. AVE. HRS. PER WEEK IN GEN. CBO MANAGEMENT IS.....20
6. AVE. GRADE OF THE SPO CBO MANAGEMENT TEAM IS.....13
7. HOW MANY SOLICITATIONS WILL BE SENT OUT?.....20
8. WHAT IS THE AVE. NO. OF PERSONNEL IN THE SPO?.....26

C. TYPICAL PRINTOUTS

C.2 MODEL RESULTS

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TEST1.DAT SUMMARY OF RESULTS 04-04-1987

	HOURS	COST	INFLA	FRINGE	TOTAL
SCREENING	743	29631	30520	5062	35582
PRICE ANAL	4	158	163	25	188
SOURCE APP	80	16102	16586	2593	19179
SOURCE DEV	720	52700	54281	8486	62768
SOURCE SEL	433	15847	16322	2552	18874
REVERSE ENG	220	8051	8293	1296	9589
FIRST ARTIC	0	0	0	0	0
CONTRACTING	450	16468	16962	2652	19615
GENERAL SPO	312	12432	12805	2124	14929
PRE-AWD SVY	0	0	0	0	0
SPO TOTALS	2962	151394	155935	24792	180728
SECURITY		12000			12000
EEO SUPPORT		0			0
SOC-ECON CST		6000			6000
WARANTEE CST		50000			50000
TERMIN CST		44444			44444
NEW EQUIP		30000			30000
FAC MOD CST		200000			200000
ADMIN & AUD		125000			125000
TRANSPORTATION		1287			1287
SOLICITATION		200			200
TOTAL CBO COST		620325			649660
SAVINGS		379674			350339
LOST OPT COST		-28711			-28711
THEO SAVINGS		408384			379050

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